Perfume Specialties of Givaudan Quest

Glen O. Brechbill

Creative Endeavor Books

www.perfumerbook.com

New Jersey - USA

2007

To my parents & brothers family whose
faith in my work & abilities
made this
manuscript possible

Designed by Glen O. Brechbill

Library of Congress

Brechbill, Glen O.
Perfume Specialties of Givaudan Quest/Glen O. Brechbill
P. cm. 94 pgs.
1. Fragrance Ingredients Non Fiction. 2. Written odor descriptions to facillitate the understanding of the olfactory language. 1. Essential Oils. 2. Aromas. 3. Chemicals. 4. Classification. 5. Source. 6. Art. 7. Fragrances. 8. Science. 9. Creativity. I. Title.

20070717

Certificate Registry # TXu1 - 366 - 362

PRINTED IN THE UNITED STATES OF AMERICA

10 9 8 7 6 5 4 3 2 1

First Edition

Last year the Givaudan Fragrance and Flavor Corporation located in Switzerland announced a merger with Quest International based in The Netherlands. Once integrated this conglomerate will become the number one player in the perfume industry with sales well over 1 billion.

It has always been a dream of mine to one day to work as an artist for one of these fine houses. As I assembled my collection of personal books I realized long ago that learning the hidden meaning behind aroma chemicals takes a great deal of work, time, and energy. Reference books particularly ones that are up to date and comprehensible are rare due in part to the secrecy of the industry. A composition is assembled from floral and other fragrant materials that together creates a harmonious blend known as a fragrance.

Collecting aroma chemicals has been a hobby of mine. The world wide web has helped to facilitate this process. Finding the items displayed in my books and web site has taken many thousands of searches including following leads and links. Again, the more fragrance ingredients one knows in turn helps to facilitate the understanding of the art. The materials that are showcased in this manuscript are at the heart of the creative process.

The idea for this book came into play due in part to the lack of reference guides to fragrance ingredients. I felt that the Givaudan Quest fragrance house together made a fine presentation by itself. The hardest part of a book besides the text has to be choosing a title. Selecting a pleasing arrangement of fonts including type, and layout is a close second. Employing my self-taught graphic design skill alowed a great deal of pertinent information to be condensed in a easy to use and view format.

It is my hope that you will like my presentation of the Givaudan Quest creative offerings, and the articles that are to the rear of the manuscript. Perhaps one day with time when enough interesting articles are located the information will appear in a separate tome. At the point of publication it is not known what the name of the new house will be.

Again, enjoy my journey into the fascinating world of fragrance ingredients.

Perfume Specialties

Givaudan Fragrance Corporation

Overview

Imagine a group of dedicated individuals charged with the mission to "make the world smell better™" - that is the credo of Givaudan Fragrances. Born in 1820 in Grasse, France - "the flower basket of the world" and the birthplace of the perfume industry - Givaudan has over 180 years of experience creating the world's most memorable fragrances. In 1935, Givaudan became the first company to collaborate with the fashion industry to create the first designer fragrance.

Givaudan has a global team of 70 perfumers specialising in the design of both fine fragrances and consumer products Givaudan's global structure includes a network of six Creative Centres - located in Bangalore, New York, Paris, São Paolo, Shanghai, and Singapore - that enables a world-class team of perfumers to create fragrances for customers anywhere in the world. Givaudan is committed to building true business partnerships with customers by Leading Sensory Innovation in the form of new fragrance concepts, products and brands for the global marketplace.

Givaudan is the only fragrance company with its own perfumery school where many of the world's leading perfumers have been trained. Perfumers from this school have created one out of every three fragrances that exist in the world today. Also known as leading researchers, Givaudan's expert scientific team studies the genetics of olfaction, the molecular modelling of fragrances, and sensory psychology to explore the perception of smell, as well as a variety of other related state-of-the-art disciplines.

The Essential Source for Consumer Products

The Givaudan Consumer Products Division leads the industry as the top creator of fragrances for consumer products categories. Givaudan fragrances can be experienced in the top brands of shampoos, soaps, deodorants, body lotions, candles, air fresheners, laundry detergent and fabric softeners in every major region in the world. Fragrance plays a key role in a consumer product brand positioning and the sensory experience a scent delivers can enhance a brand's overall perception and marketplace performance.

Givaudan's industry leadership is the result of investments in both the creation and production of the highest quality fragrances for their clients portfolio of brands. Each product requires a unique set of specialized expertise–from perfumery, fragrance evaluation and consumer research to marketing & applications technology–which are essential during the creation process. Givaudan has a global network of perfumers who collabo-

rate to provide the technical expertise and consumer insight.

Givaudan's focus on consumer understanding has resulted in proprietary consumer research methods that assure that their fragrance creations generate the highest consumer appeal. Facets/Netscreen™ offers a fast and precise measurement of a fragrance's fit to concept while ScentCast™ delivers olfactive trend forecasting that generates a range of creative start points to inspire new scents & new product concepts.

Trend Forecasting offers clients fascinating viewpoints on how trends across diverse categories will impact what scent experiences consumers will desire in the future. Knowing what is next and knowing how to translate consumer insights into tangible consumer benefits demonstrates Givaudan's focus on being recognized as the premier partner–the Essential Source–for fragrances for their brands.

Fine Fragrance

The Givaudan Fine Fragrance Business creates signature fragrances for perfumes and colognes. Working in close collaboration with its clients-Givaudan perfumers olfactively translate "desired sensory attributes" - emotion, feeling, lifestyle, sensation, attitude & style into a finished fragrance.

With two fine fragrance studios in Paris and New York and access to Givaudan perfumers around the world, Givaudan's Fine Fragrance division offers top of the line service to fragrance houses, beauty companies, fashion designers, celebrities, lifestyle brands, and specialty retailers. With a reputation for creativity, Givaudan also attracts the world's best perfumers. Givaudan is known for its Perfumery School, where new talent experience a one of kind apprenticeship. Specialized perfumery training is also offered to clients who wish to advance their olfactive skills.

Givaudan has a distinguished history of creating fine fragrances that are best sellers and classics that established new scent trends. Also notable is that Givaudan created the first designer fragrance, Shocking, by Elsa Schiapparelli in 1937–starting a trend that redefined the industry. Givaudan is the recipient of numerous Fifi Awards for its Fine Fragrance creations and for Breakthrough Innovation for ScentTrek technology and the Virtual Aroma Synthesizer.

The Fine Fragrance group is a source of creative inspiration for its clients who are seeking new product concepts, licensing opportunities and new olfactive trends based on global consumer intelligence. Givaudan is advancing consumer research with Fragrance Relevance™, a proprietary technique that identifies unique fragrances that achieve high levels of consumer appeal.

FRAGRANCE INGREDIENTS

Givaudan's Fragrance Ingredients business unit focuses on the design, production and commercialization of Perfumery raw materials.

Most of the materials are patented specialty chemicals that were first developed at our research centers.

Thanks to a continuing effort, Givaudan has become a leading company in terms of new molecules patents. This is driven by a strong company commitment, upstream research and strong instrumental support.

Innovation

Overview

Givaudan is the industry leader in science and technology. Maintaining a high rate of innovation is essential to industry leadership and the long-term success of Givaudan. The company's customers, who operate in a very competitive environment, are constantly looking for new innovative ideas to differentiate their products in the marketplace. It is the ability to take a flavour or a scent found during a Trek or a new molecule, identify its potential and then transform it into a successful and viable market concept that makes Givaudan unique.

To chronicle discoveries at the source, the experts first capture the aromas or scents in their "finds." They then set up a dedicated mini-lab in the forest, jungle, market, farm or wherever they happen to find themselves. Next, they extract a sample of the molecules that emit from the item of interest and bring a drop of liquid containing the full molecular make-up of the "find" home to the Givaudan laboratories.

On-site samples are taken without harming the environment in any way. Back at the Givaudan laboratories, scientists study each sample to crack nature's codes and recreate the flavour or fragrance for commercial use. The discoveries provide the rare and exciting, building blocks that lead to unique products and marketplace successes.

Through its leadership in Sensory Innovation, Givaudan is highly committed to providing its customers with solutions offering unique sensory profiles and improved performance. In 2005, Givaudan's research teams made further progress in the understanding of taste and smell and continued to focus on the search for novel ingredients and the development of delivery systems.

The enhancement of the range of creation tools allowed further increases in the efficiency of Givaudan perfumers and flavourists. Research and Development continued to strengthen its links with academic and industrial partners, enhancing its position at the cutting edge of science and technology. Outside collaborations provide a complement to the internal innovation programmes. They are a mechanism to investigate a broad spectrum of emerging technologies which might lead to co-development opportunities.

Flavour Research

of high performance flavour solutions requires a steady stream of innovative science and technology advances. Givaudan's Flavour Research addresses these needs with resources focused on core fields of discovery in natural products, proprietary ingredients, delivery technology and sensory science where technology leadership is essential.

Understanding what the consumer desires is a vital first step in the flavours design process. To this end, the miniaturised Virtual Aroma Synthesizer™ (VAS) has been utilized by the flavourists to interface directly with consumers to develop valuable sensory knowledge. It allows rapid screening of new concepts and identification of attributes which increase liking. This methodology has eliminated the sensory fatigue normally observed when panellists are asked to evaluate multiple samples. In addition, the sample throughout can be

increased more than ten-fold, making this methodology a true differentiator for consumer sensory research. With the introduction of OPUS™, the flavour design process now incorporates a predictive modelling tool with automated decision making capability. When integrated into the creation process, this tool provides information on potential flavour compatibility issues within a specific food or beverage matrix. This results in greater speed, accuracy and cost effectiveness during the design process. It rapidly leads to flavours that meet the precise performance characteristics expected by customers.

The increased emphasis on healthy eating habits has introduced some unique taste challenges into flavour design. For example, there has been an interest in salt reduction for some time, but the available solutions do not yet fully meet expectations. Investigation within the Taste Essentials™ is centred on two distinct approaches: the partial replacement of salt with an enhancer and the masking of off-tastes such as bitterness. A series of natural taste modulators were developed to mimic the taste enhancing quality of salt, while significantly reducing the off-taste and amplifying the overall flavour performance. These modulators were developed based on expertise in biotechnology and discovery of botanical ingredients in the TasteTrek® expeditions. These new proprietary natural ingredients exhibit taste-relevant properties that are not matched by synthetics. An equally important issue has been the reduction of negative taste attributes, principally bitter aftertaste, present in many of the artificial sweeteners in commercial use. An ongoing investigation has defined the human genetic sensitivity to the bitterness aspect of sweeteners. Bioassays have now provided a highly efficient means of screening for molecules that have the ability to suppress the offtaste.

Optimisation through in silico modelling has generated a number of promising lead compounds which attenuate the negative bitter attributes of several artificial sweeteners. High impact aroma building blocks are required to guarantee product superiority. A new generation of citrus and dairy top notes has been developed through the application of a proprietary non-thermal separation technology. These new building blocks further increase the creation flexibility in the flavour design process. Encapsulation technologies become extremely important in situations where retention and release properties are critical to flavour performance. Specifically, TasteSaver™, a matrix encapsulation system, has been introduced to provide more control over the release kinetics of the flavour composition in applications where there is prolonged exposure to higher temperatures.

Perfumery School - See Page # s 58 - 60

Fragrance Research

Fragrance research's primary objective is to develop new molecules and unique naturals to enrich the perfumer's palette. Additional focus is on the continuous development of new delivery systems, the better understanding of smell, the counteraction of malodour and the search for new accords found in nature through the ScentTrek® expeditions. A total of thirty-four patent applications were filed in various fragrance research domains.

In 2005, four new proprietary molecules, developed by a Givaudan research centre in Zurich, were introduced to the perfumers' palette: Pomarose, a very rich fruity note, reminiscent of rose and apple pie, perfectly meets the "gourmand" trend towards comforting smells stemming from the world of food. Cosmone, with a rich and intense musky note gives an elegant touch to all kinds of accords. This biodegradable molecule, in addition to

Nirvanolide, enlarges Givaudan's range of environmentally friendly macrocyclic musks. Serenolide is an elegant white musk with sweet fruity connotations providing warm and soft velvety notes that blend well with all kinds of trendy fruity accords. Safraleine surprises with its spicy saffron freshness. This new note perfectly fits into the fine fragrance's increasing demand for spicy smells.

To further strengthen its research capabilities for new molecules, Givaudan opened a supplementary research laboratory in Shanghai. This new facility will leverage the opportunity of Givaudan's current partnership with Chinese universities,while taking advantage of the increasingly strong chemistry expertise in China.

Granuscent, a new, patented delivery system,was commercialised with the launch of a major product in the USA. A novel controlled release system for liquid products, based on a liquid crystal technology, successfully passed the milestone for industrial scale-up. Furthermore, pressure activated microcapsules were added to the range of Givaudan's delivery systems. This technology was successfully validated in consumer tests and has now entered the scale-up phase. It is designed for laundry applications where the molecules anchor to textiles during the washing process and release their odour when the textiles experience physical friction later on.

Givaudan continued to make progress on its studies to counteract malodour. Thanks to the expertise in fragrance precursors and the increased understanding in the formation of axilla malodour, further compounds could be developed. Upon action of the bacterial enzymes, these compounds release a fragrance molecule and, in addition, reduce the formation of the malodourants. The publication "Isolation of a bacterial enzyme releasing axillary malodor and its use as a screening target for novel deodorant formulations" of the Givaudan scientist Andreas Natsch et al. in the International Journal of Cosmetic Science (IJCS) was voted the best IJCS paper in 2005.

Givaudan's fragrance research remains strongly committed to retaining its leadership in the understanding of smell. The company pursues its own research activities and closely monitors industrial and academic research. Significant progress in the characterisation of olfactory receptors and their use as biosensors to identify novel odorant lead structures has been made.

Givaudan's renowned ScentTrek® activities were also pursued in 2005. Ten reconstitutions were made of endangered flowers from the Western and Northern Cape in South Africa. Among them is a highly attractive ionone-floral scent. As Death Valley (California, USA) experienced a century spring with unusual rich blossom activity, Givaudan conducted a specific ScentTrek® to collect the smell of some rarely flourishing endemic plants. The library of reconstituted natural scents has now grown to over 400 items. It has proven to be an irreplaceable source of inspiration for the creation of all types of fragrances.

Health & Wellness

TasteSolutions™ for Health and Wellness by Givaudan: flavours for healthy lifestyles and an overall sense of well being

In response to consumer demand for more healthful products Givaudan Flavours has introduced TasteSolutions™ for Health & Wellness. This programme provides essential taste modulators such as maskers, modifiers and flavours that enable food and beverage manufacturers to develop products that both

contribute to healthier lifestyles and taste great. Active, busy lifestyles have driven consumer desire for physical and mental wellness, and obesity has created major health concerns.

Today, consumers around the world are increasingly holistic in their approach to health and wellness; they seek foods, beverages, and lifestyles that contribute to healthier living. While food and beverage manufacturers are responding, they face major product development challenges to deliver the great taste consumers expect.

The TasteSolutions™ for Health & Wellness programme uses proprietary technology and ingredients to create flavours that can modify common negative taste attributes that often occur when formulating healthful foods and beverages. The programme includes products such as maskers, modifiers, and enhancers, along with the experience and knowledge to utilise them in customised ways to create flavours. Expertise in product formulation, sensory science, ingredient development, consumer insights and regulatory affairs, along with the world's largest group of flavour scientists are key components of the TasteSolutions™ programme. Our products and capabilities together provide the TasteEssentials™ to deliver the great taste consumers expect.

Givaudan understands that Health and Wellness is more than just a trend. Consumers are changing their diets in fundamental ways, and over time, products that contribute to healthier lifestyles will simply become mainstream. TasteSolutions™ for Health and Wellness emphasizes Givaudan technologies and capabilities in overcoming taste challenges often associated with healthful products. Givaudan realises these challenges and is committed to increasing investment in taste research and greater understanding of consumer health and wellness trends.

Givaudan is the essential source of sensory innovation for our customers driven by our mutual passion for excellence.

TASTETREK

TasteTrek® by Givaudan: Discovering a new palette of flavour ingredients from around the world.

From the isolated Masoala Peninsula of Madagascar to the markets and farms of Vietnam, TasteTrek teams travel the globe to discover new tastes and aromas never before used in flavour creation. TasteTrek teams explore an exotic location by setting up camp and a mini-lab in an area where there is a high probability of new discoveries–from a lush rainforest to a farm in a small village. By examining first-hand the fruits, plants, pods and herbs indigenous to a region, Givaudan scientists and flavourists identify new ingredients, new flavour experiences and important clues that lead to the creation of new molecules. TasteTrek teams also endeavour to learn local food preparations and authentic cooking techniques. Where they go and who they meet is as interesting as what they find. TasteTrek discoveries are translated into an incredible palette of new flavour inspirations that are shared exclusively with Givaudan customers.

Proprietary Sampling Techniques

Setting up a TasteTrek mini-lab in the forest, jungle, market, farm or wherever they may find themselves, the Givaudan team captures the aroma of an item of interest, using a proprietary sampling technique that does not disturb the delicate balance of the environment. The aroma sample is then carefully transported to Givaudan where scientists analyse each sample, study its molecular makeup and recreate the flavours for commercial use.

Innovation in Taste

TasteTrek discoveries provide Givaudan flavourists with unique building blocks and an expanded and culturally diverse flavour palette. Givaudan TasteTreks are an essential source of inspiration for Givaudan customers who are seeking unique taste experiences to incorporate into their new products.

Using innovative scientific approaches to capture new and authentic ingredients, Givaudan TasteTreks are a unique example of how Givaudan is bringing the world of flavours to global customers.

Givaudan is the essential source of sensory innovation for our customers driven by our mutual passion for excellence.

Scentrek

ScentTrek® by Givaudan: Exploring the world's most exotic locations in search of new scents

ScentTrek is a proprietary technology that has earned Givaudan the Fragrance Foundation’s prestigious award for “Breakthrough Innovative Technology”. This proprietary technology allows Givaudan scientists to capture scents in their natural habitat where the climactical and ecological conditions contribute to the unique olfactive impression of a plant or flower. Rather than simply transporting a plant or flower to a lab, ScentTrek technology allows for the truest impression of a scent. The plant or flower is not harmed during the process and Givaudan does not disrupt the delicate balance of nature. The perfumers and scientists who are selected for a particular ScentTrek mission have an exceptional opportunity to explore the natural world together and seek inspiration and ideas that lead to other new sensory innovations.

A Total Sensory Experience

Perfumers and Fragrance Research scientists have been on over 80 ScentTrek expeditions together, creating the worlds’s most incredible palette of rare and exotic scents never before used in perfumery. From the rainforests of French Guyana and Gabon to Papua New Guinea, Madagascar and Costa Rica, ScentTrek has received worldwide press coverage in hundreds of media outlets, including The New York Times, BBC, National Geographic, Newsweek, Fast Company, Discovery Channel and CNN’s Business Unusual. The National Geographic book “Perfume” has dedicated an entire chapter to ScentTrek expeditions.

Fragrances With A Unique Signature

ScentTrek discoveries have become an important part of Givaudan creations and are featured as unique signature notes in many important new fragrances. These essences, by nature's design, impart a more natural scent experience and have interesting ingredient stories which translate beautifully to consumers' desire for more authentic, unique and expressive fragrances.

Givaudan is the essential source of sensory innovation for our customers driven by our mutual passion for excellence.

Chief's Council

Givaudan Chef's Council™: The ultimate coming together of culinary brainpower

Givaudan Flavours has developed a Chef's Council, which is a diverse team of culinary experts who focus on culinary trends, stimulate creativity and enhance innovation in the development of new culinary concepts. The Chef's Council is a rotating panel of the best talent in the culinary world– an eclectic mix of chefs from prominent restaurants and internationally renowned culinary schools.

The Chef's Council has been formed by Givaudan to work side by side with their own extensive staff of chefs, flavourists and food scientists to explore and advance new and exciting culinary trends. Ultimately, it is designed to bring the collective creativity and passion of chefs and scientists together to inspire new innovations in flavour.

A Unique Collaboration

In the search for the tastes of tomorrow, Chef's Council events deliver a variety of innovative ideas and dishes that may become the flavour trends of tomorrow. At a Chef's Council event, each participant brings something unique to the table. The chefs bring experience, culinary trends, real-world applications, new ingredients, recipes, and favorite cooking and preparation techniques. Givaudan scientists and flavourists then add the utilisation of flavours and ingredients, flavour technologies and delivery system expertise. This collaboration of the art of food preparation with the science of flavour technology is the foundation for the Givaudan creative process.

Inspiring Flavours for Customers

The Chef's Council has inspired the creation of many innovative flavour concepts and ingredient combinations as well as new product ideas. The Chef's Council brings Givaudan's flavour expertise and the cooking techniques of the world's culinary leaders together with the common goal of providing Givaudan customers with First-on-Trend™ taste sensations.

Givaudan is the essential source of sensory innovation for our customers driven by our mutual passion for excellence.

Specialty Bases

Apple Juice Givco 223

Reflects the distinctive fresh fruity and tasty red apple odor. It evokes the taste sensation of a red apple juice. The floral background enhances its volume and provides a nice harmony in fragrance. It provides sophisticated fruity natural freshness to floral accords with lift and radiance.

Bergamot Givco 104

This reconstitution is bergapten-free and has no phototoxic potential. This is a bergamot that replaces the essential oil with superior stability and performance in functional products.

Birch Leaf Givco 166

In the sauna, the Scandinavians traditionally use birch twigs to stimulate the blood circulation. The characteristic fragrance of heated birch leaves in a sauna bath was studied using a multidimentional analytical process carried out by our research department. Ideal for use in "back-to-nature" concepts and for providing original freshness.

Black Agar Givco 215

This resin is highly valuable due to its rich woody ambery complex.

Castoreum Givco 116

Is a reconstitution of the natural oil, which it can replace in equal amounts. This reconstitution contains only synthetic ingredients and plant-based naturals. It reflects all the typical warm, animal, leather-like notes and is a highly interesting note for use in chypre, tobacco, leather and fougère types.

Citrilys Givco 169

A pleasant citrus accord which evokes freshly squeezed tangerine peel blended with floral marine notes, giving it an unusual sparkling zest. The fruity background enhances the composition's natural aspect. Extremely diffusive and long-lasting, it performs well in most functional product bases. Designed for use as a top and middle note, it gives freshness and volume to all citrus, floral and green accords.

Civette Givco 208

This Givco is a close reconstitution of civet absolute, which it can replace in equal amounts. It does not contain any animal extract. It adds diffusive warmth to fragrances and provides the distinctive effect produced by natural civet in floral-jasmin, amber, oriental, chypre, and tobacco accords.

Dossinia Givco 167 PMF

Dossinia is the name of an orchid native to Borneo with a delicate scent, similar to lily-of-the-valley with a touch of privet and watermelon. It is used in floral, fresh, transparent and aqueous accords like "eau fraiche".

Galbanum Givco 121

This Givco is an economical reconstitution of the natural fragrance of galbanum oil with all its typical olfactive properties. Used exactly as natural galbanum oil to provide a powerful green effect in all areas of perfumery.

Geranium Givco 222

Is an economical reconstitution of the rare natural Geranium Bourbon oil. It reproduces the fresh green sparkling and minty herbaceous characteristics with a rosy floral volume. It can replace the natural oil in equal amounts. Used exactly as natural Geranium oil to provide a refreshing green floral in all areas of perfumery.

Grapefruit S Givco 230

Givaudan proposes Grapefruit S Givco 230 to provide a solution to the severe crisis on cost and availabili-ty of grapefruit oil and derivatives for fragrances compounding. Grapefruit S Givco 230 gives the same effect as high quality natural grapefruit oils in every formulations at a very attractive price.

Green Ivy Givco 168

A clean, refreshing interpretation focusing on the distinctive fresh, green, slightly dry notes of ivy, enhanced by a floral accord. Powerful even in small dosages, it brings freshness and presence to a wide variety of fragrances from simple florals to chypres. It gives a natural green effect in most applications.

Green Tea Givco 228

Built from new specific Givaudan molecules, is a new creation that allows interesting effects in Fine Fragrance, Beauty and Laundry care. Green tea Givco 228 is an original leaf concept that complements the collection of Leaf Givco bases: Birch Leaf Givco 166, Tomato Leaf Givco 224, Green Ivy Givco 168.

Honeyrose Givco 219

Is a rich, natural and enveloping fragrance. It reflects the characteristic sweet honey odor diffusion of a rose in the sun. In this com-bination the fresh diffusive rosy elements give a floral transparency to the powerful and typical honey accord. Its sweet and velvty facets are particularly interesting in chypre, floral and heavy oriental accords, where it gives a long lasting body effect.

Iris Givco 204/2

This is a floral base specifically designed to match the scent of orris absolute for use in functional applications. This reconstitution reflects the different facets of natural orris absolute: gourmand, floral, woody and powdery. Iris Givco 204/2 acts as a modifier of Isoraldeine 70 and Ionone Beta, boosting and imparting sparkling and vibrant effects to them. It also blends beautifully with floral-green accords and enriches woody/chypre themes. This base does not lead to discolouration. Cost-effective, natural-smelling and stable replacement for orris absolute.

Jasmin Etoile Givco 144

Star jasmine (Trachelospermum jasminoides), a native of the southern Himalaya, is a woody evergreen climber with small leathery leaves and small white flowers giving a most elegant spicy-floral odour. The very uncommon combination of spicy and white flower notes is due mainly to the presence of Linalool, Indole, Methyl Jasmonate, Jasmones, andIso Eugenol. In Jasmin Etoile Givco, Isoeugenol has been replaced by an exclusive Givaudan molecule. This Givco fragrance can be used in all floral and chypre compounds.

Kumquat HS Givco 181/3

The headspace of this fruit showed an original peel note which differentiates from classical citrus by its strong personality. Kumquat HS Givco 181/3 has a pleasantsparkling hesperidic accord created from a headspace analysis of the Kumquat fruit. It is a fresh, citrus, fruity, green creation, enhanced by an aldehydic complex.

Lemon Givco 112

This base is an imitation of natural lemon odour that in addition has excellent stability and substantivity in all kinds of finished products. This Givco was especially developed for difficult bases like H.D.L.D. and H.D.P.D. Has strong diffusion & good impact on wet laundry.

Lemon Givco 112/2

Fresh lemony yet still powerful.

Lindenblossom Givco 151 PMF

The creation of Lindenblossom Givco 151 PMF was inspired by an exclusive Givaudan chemical and the per-

fume that surrounds blooming Linden trees in early summer. Linden blossom Givco 151 PMF is used as a central note in formulas but at the same time is also very effective in the top notes and the dry down.

Mamey Givco 200

Mamey or mammea americana is a fruit originating in the Caribbean and the northern part of South America. It is used in fruit salads, freshly squeezed in juices, and in cooked form in compote. Mamey is powerful and long-lasting and provides a warm, fruity volume to chypre, osmanthus and spicy accords. It also adds richness to jasmine and tuberose notes.

Oakmoss Givco 214

Oakmoss Givco is a safe, synthetic oak moss reconstitution. This complex mixture containing patented Givaudan items accurately reproduces the effect of natural oak moss. Not subject to IFRA restrictions. Can be used in the same applications and at the same dosage level as the natural extract. It provides warmth and volume to chypre and woody accords.

Orange Power Givco 229

Orange Power Givco 229 is based on a reconstitution of the concentrated essential oil. It has a typical orange note and a good stability. Orange Power Givco 229 contains less than 2% Limonene

Orangia Givco 213

This economical base relects the typical fragrance of freshly squeezed sweet orange. Exclusive Givaudan ingredients, including a powerful new captive molecule, have been incorporated to provide a sparkling, zesty aspect. Can be used in all citrus and fruity accords to provide a more natural and intense orange effect.

Orris Givco 204/2

This is a floral base specifically designed to match the scent of orris absolute for use in functional applications. This reconstitution reflects the different facets of natural orris absolute: gourmand, floral, woody and powdery. Orris Givco 204/2 acts as a modifier of Isoraldeine 70 and ionone beta, boosting and imparting sparkling and vibrant effect to them. It also blends beautifully with floral-green accords and enriches woody/chypre themes. This base does not lead to discolouration.

Philodendron Givco 201

Philodendron solimoesense has aerial roots hanging down from giant trees in the rain forest of French Guyana. When one of these roots is cut, one immediately perceives the grapefruit scent against the background of a woody accord. Philodendron has a refreshing effect in all applications. Through its typical citrus-woody character it helps to modernize masculine accords & provides a natural image to perfumes.

Rose Givco 217

Is a rich, warm, economical rose fragrance with all the fresh, natural character of a rose blossom. Its olfactive structure resembles that of natural Turkish rose oil. This rose note blends well in all types of compositions, enriching and underlining the floral bouquet character of the fragrance. It performs extremely well in most perfume types, particularly in agarbatti, and is very long-lasting.

Sampaquita Givco 138

Sampaquita, also known as Jasmine Sambac, is a flower that grows in the Philippines. This Givco base is a cost-effective reconstitution of its scent. This small bush with its attractive sweet-scented tiny white flowers is highly appreciated in Asia. The delicate fragrances of carnation and ylang together with a slightly green note were artistically grafted onto a rich basic accord of jasmine, tuberose, honeysuckle and are easy to blend in most compositions. It gives a new floral-jasmine effect to formose.

Sandalwood Givco 203

This base is a synthetic sandalwood oil. It reproduces the extremely fine, powerful, rich and sweet sandalwood odour. It is a complex mixture of captive and patented aroma chemicals, also including essential oils, but does not contain sandalwood oil. Can be used in the same way and in the same proportions as the original oil. The cost performance ratio is exceptional and the product has very good substantivity.

Sandec Givco 220

This base is an economical Sandalwood oil reconstitution. It reflects well the natural tonality of the oil with its powerful volume and milkiness. It is a complex mixture of patented aroma chemicals but, does not contain Sandalwood oil. Can be used in all applications to provide natural Sandalwood effect. The cost / performance ratio is exceptional and the product has a very good substantivity. In Agarbatti, it provides exceptionally good substantivity.

Souroubea Givco 202

Souroubea is a species belonging to the Amazonian family of Marcgraviaceae. It blossoms as a gleaming yellow-orange spot in the crown of canopy trees. Souroubea gives attractive new effects in floral bouquets. It provides richness and natural sophistication. Useful for top, body and base notes.

Tangeris Givco 212

A pleasant citrus accord that evokes freshly squeezed tangerine peel, blended with floral, marine notes that give it an unusual sparkling zest. The fruity background enhances the composition's natural aspect. Extremely diffusive and long-lasting, it performs well in most functional product bases. Designed for use as a top and middle note, it gives freshness and volume to all citrus, floral and green accords.

Tomato Leaf Givco 224

Has a green, natural tomato leaf note. Used as a top note ingredient, it imparts a powerful fresh-natural effect and also provides green volume to all perfumes. It can be used in hair care fragrance where it produces new and original twist as well as in soap to enhance the impression of naturalness. Designed for use as a top and middle note it gives freshness and naturalness to all compositions. With its aromatic green vegetal balance, it is well accepted for shampoo and soap top note. It can be used in a wide variety of fragrances from citrus to chypres. Its good diffusivity performs well in most functional products. It provides excellent base malodor coverage.

Toscanol

A powerful and linear anisic ingredient, having a sweet spicy note of Estragole (methyl chavicol). Licorice and Sassafras oil character with a touch of Saffran, Myrtle, Opopanax and Carvi Seeds. Can be used in all kinds of accords to add anisic agrestic and aromataic character. Useful in fine and functional fragrances.

Tropifruit Givco 205

Tropifruit is an exotic fruit specialty. It reflects the typical odour of juice cocktail based on papaya, mango and Maracuja fruit. It gives lift and radiance to floral bouquets and provides sophisticated natural freshness to citrus accords. It rounds out aldehydic and green notes, and adds attractive effects to chypre and oriental concepts.

Ultrazur

Is a new base that can be used in most applications where a fresh substantive, ozonic note is desired. It associates extremely well with fresh, citrus, floral, chyrpe, aromatic, agrestic, spices, white florals and woody. Brings substantiave, fresh aspect to fragrances helps to add volume and diffusivity and at the same time rounds out a floral composition. Several percent imparts a fresh, ozonic, slightly ambery aspect to laundry and mens fine fragrances.

Vert de Cassis Givco 180

A green, fruity note that evokes the odour of freshly crushed black-currant leaves. Vert de Cassis Givco 180 gives freshness & diffusion to all citrus and green accords. It also produces a grapefruit twist and a fresh vegetable effect. It provides excellent base malodour coverage.

Ylang Givco 225

Is the economical reconstitution of the essential oil. Intensely, floral, powerful, balsamic and spicy, it reflects all the typical odor characteristics of ylang-ylang oil. The creamy-sweet and spice parts of the top note are nice balanced and allow the use of Ylang Givco 225 as a replacement of ylang ylang oil in many applications. This cost effective Ylang Ylang blends well in all type of floral

compounds, especially in so called "white floral" bouquet such as jasmin, magnolia, muguet, tuberose.

Givaudan s Aroma Chemicals Compendium

Adoxal	Fresh, aldehydic, powerful, floral, rosy, marine.
Alcohol C - 11 Undecylenic	Fresh, citrus, slightly waxy.
Aldehyde C - 10 Decylic	Powerful, waxy, aldehydic, orange character, citrus.
Aldehyde C - 11 Undecylenic	Powerful, aldehydic, floral-green, rose-citrus.
Aldehyde C - 110 Undecylic	Aldehydic, citrus-peel, fatty, diffusive.
Aldehyde C - 12 Lauric	Aldehydic, intense, woody, fresh and clean.
Aldehyde C - 12 MNA Pure	Aldehydic, dry, amber, warm.
Aldehyde C - 6 Hexylic	Aldehydic, fatty, green, powerful.
Aldehyde C - 9 Nonylic	Aldehydic, powerful, fatty, rosy, citrus.
Aldehyde Iso C - 11	Aldehydic, green, rosy, powerful.
Aldehyde Cyclo Hexyl Propionate	Fruity, green, powerful, linear has pineapple character fresh and natural.
Ambrettolide	Musky, powerful, warm, ambrette seed, fruity.
Ambrofix	Ambery, woody, tobacco, dry.
Anisyl Acetate	Floral-anisic, fruity, slightly balsamic.
Anisyl Alcohol	Floral-anisic, herbaceous and powdery adds volume to floral accords.
Aurantiol Pure	Floral, orange-blossom, linden blossom also known as a Schiff Base.
Base 3	Leather, woody, moss indispensable element in masculine blends.

Berryflor	Fruity, floral-anisic, fresh, balsamic, floral raspberry like product.
Bisabolene	Balsamic, sweet, myrrh, orange flower, warm, sweet-spicy-odour.
Boisiris	Woody, ambery, orris is a rich woody chemical with distinct orris note.
Butyl Quinoline Secondary	Leather, green, woody, earthy, powerful has fine woody vetiver character.
Celery Ketone	Herbaceous spicy, celery used as modifier of aldehydic chypre and fougeres.
Cetonal	Orris, woody, powerful elegant ingredient in woody, leather, tobacco.
Cetone Alpha	Orris, woody with a powdery background. An ionone used in floral.
Cetone V	Fruity, floral-green, woody, powerful. Has many uses - citrus, lavender.
Cyclal C	Green, leafy, floral, powerful. Has green character blends well diluted.
Cyclamen Aldehyde Extra	Floral, green, powerful. Used in floral, green, fresh and marine accords.
Decatone	Citrus, woody, fresh, fruity. Has woody vetiver, citrus grapefruit character.
Decanal - 4 - Trans	Aldehydic, orange, green floral. Used mainly as top note ingredient.
Dihydro Ambrate	Woody-ambery. Gives rich balance to compounds adding warmth and body.
Dihydro Ionone Beta	Woody, floral, orris, slightly ambery, fruity. Well known Ionone fragrance.
Di Methyl Anthranilate	Orange flower, mandarine, neroli-like. Similar to Schiff Base no colour.
Di Methyl Octenone	Citrus, fresh, fruity. Useful in citrus accords adds natural bitterness note.
Dimetol	Lavender, citrus, fresh, floral woody, powerful. Has fresh natural character.
Ebanol	Sandalwood, musk aspect, powerful. Rich natural sandalwood odour.

Ethyl Linalool	Fresh, floral, rich. Has lavender, bergamot, coriander character sweeter.
Ethyl Linalyl Acetate	Fresh, floral, bergamot, fruity, pear-like. More floral, and bergamot like.
Ethyl Methyl - 2 - Butyrate	Fruity, green, apple peel, pineapple skin. Fruity effect serves as modifier.
Florhydral	Floral-green, muguet, fresh, powerful. Fresh, trendy, natural odor of lily.
Folione	Powerful, green, leaf-like, floral. Used in traces violet leaf cucumber note.
Folrosia	Rosy, green, slightly woody-earthy. For fougere and lavender types.
Freskomenthe	Fresh, cool mint, agrestic, woody aspect. Freshness wide range of accords.
Geranodyle	Geranium, rosy, fruity. Complex blend with fresh geranium odour.
Givescone	Rosy, spicy, fruity, woody. Has floral, spicy, fruity, woody nuances.
Glycolierral	Soft floral-green, milky, rem of ivy leaves, woody. Top note modifier.
Ionantheme 100 %	Floral, orris, sweet, violet-like, fruity, powdery. For use in floral blends.
Ionone Beta	Floral, orris, fruity, woody. Has intense freesia character useful in violet accords.
Irisone Alpha	Floral, orris, violet-like, woody. Used in all types of compositions.
Irisone Pure	Floral, orris, violet-like, fruity, woody. Powerful rich floral character.
Irone Alpha	Floral, orris, woody. Has a rich, floral and natural character, and constitutes an important element in orris and violet compositions as well as being useful when an exotic nuance is required. Very diffusive.
Iso Butyl Quinoline - 2	Leather, woody, powerful. Used in chypre, leaher and woody accords.
Isojasmone B - 11	Floral, warm, jasmine-like, herby. Used in jasmin and floral blends.
Iso Propyl Methyl - 2 - Butyrate	Fruity, pear-like, pineapple, green fresh and diffusive.

Isoraldeine 70	Flowery, orris, woody, fruity produces a fine rich violet note.
Isoraldeine 95	Flowery, orris, woody, fruity. Used in floral, woody, spicy, oriental.
Jasmone Cis	Floral-green, jasmine-like, warm. Use in jasmine, floral tuberose bqts.
Jasmonyl LG	Jasmine, lactonic, mushroom. Enhances and improves diffusion in blends.
Javanol	Sandalwood, creamy, rosy. powerful. New generation sandal molecule.
Kephalis	Rich, warm, woody-ambery, tobacco. Has long lasting heart/basic note.
Labienoxime 10 %	Cassis, grapefruit, green, sage flower, powerful. More linear and tenacious.
Lemarone N	Citrus Lemon. Used for lemon effect in cologne blends and floral accords.
Lemonile	Intense, lemon, cologne. Useful in lemon, verbena and lime blends.
Lime Oxide	Citrus, lime, fresh, green agrestic, powerful. Adds freshness and intensity.
Limetol	Fresh, camphoraceous, woody, cineole-lime like. Used for lemon-woody note in a wide variety of fragrance types.
Linalool Oxide	Powerful, fresh, sweet, woody, floral. Gives lift to floral accords.
Linalool Synthetic	Sweet, intense, floral. Used in perfumery for its natural floralness.
Linalyl Acetate Synthetic	Strong bergamot-lavender. Used for freshness and lavender character.
Linalyl Benzoate	Floral, tuberose-like. Blends well in oriental and floral types by lift.
Linalyl Cinnamate	Floral, fruity, balsamic, sweet. Enhances floral, fruity, character.
Linalyl Formate	Citrus, green, bergamot-like. Introduces freshness and lift to top note.
Linalyl Iso Butyrate	Fruity, fresh, lavender. Enhances top note of many compositions.
Linalyl Phenyl Acetate	Floral, honey-like. Used for honey warmth in exotic floral bouquets.
Linalyl Propionate	Lavender, citrus-bergamot-like, fruity. Is intensively clean odor.

Madrox	Woody, tobacco, ambery, warm. Useful in woody fougere and chypre.
Melonal	Powerful, grene, melon, cucumber-like. Offers powerful and unique note.
Methyl Anthranilate Extra	Floral, noroli, warm and sweet. Used in many types floral blends.
Methyl Camomille	Aromatic, fruity, floral. Has a typical herbaceous camomille flower character.
Methyl Diantilis	Spicy, carnation, sweet, vanilla. Elegant ingredient similar to Iso Eugenol.
Methyl Heptenone Pure	Citrus, lemongrass. Used to provide a natural green freshness top notes.
Methyl Laitone 10 %	Lactonic, creamy, coconut milk, coumarin-like, powerful.
Methyl Octyne Carbonate	Floral-green, violet, leaf-like. Used in floral applications for violet leaf.
Methyl Pamplemousse	Fresh, citrus, grapefruit peel-like with a Vetiveryl Acetate aspect.
Methyl Tuberate Pure	Lactonic, floral, tuberose. Powerful modifier in all kinds of floral accords.
Myraldyl Acetate	Flowery, jasmine, sweet, fruity, green. Diffusive jasmine muguet odour.
Nectaryl	Peach, fruity, apricot, lactonic. Produces natural fruit note in fine blends.
Neofolione	Green, floral, fresh, powerful. Blends very well with most floral notes.
Nerolidol Synthetic	Floral, citrus, fresh, natural. Blends with, muguet, honeysuckle, lilac.
Nonadienal	Extremely intense, green, violet leaf, cucumber, melon as modifier.
Nonadienol	Powerful, green, herbaceous, melon. Adds cucumber violet leaf note.
Okoumal	Woody, ambery, tobacco, musky. Gives richness, volume and warmth.
Oranger Crystals	Orange flower, honey, sweet. Useful in neroli/orange blossom blends.
Orcinyl 3	Oakmoss, sweet, phenolic.
Oxyoctaline Formate	Woody, powerful. Has an original long lasting character blends well.

Peonile	Floral, geranium grapefruit, fresh. Use in floral, fougere and hesperidian.
Pepperwood	Fresh smelling molecule with a spicy peppery top note.
Pharaone 10 %	Green, pineapple, fruity, undecatriene, galbanum, powerful and diffusive.
Pyralone	Leather, green, woody, powerful. Aromatic & tobacco-like, less dry earthy.
Raldeine A GV	Flowery, orris, woody, fruity. Isomeric mixture, alpha and beta ionone.
Safraleine	Has a very unique warm and vibrant character offering a new alternative to existing spicy odorants. Safraleine exhibits warm, powerful, leathery and tobacco facets, but its complexity also reveals characteristics of natural saffron, enriched by rose ketone-like floral aspects
Sandalore	Sandalwood, warm, sweet. Powerful rich warm natural sandal lift.
Sandela	Woody, balsamic, sandalwood. Classical sandal note used in all types.
Silvial	Powerful, floral-muguet, fresh. Strong ingredient adds aldehydic touch.
Spirambrene	Woody-ambery, spicy, aldehydic, strong. Blends with aldehydic top notes.
Stemone	Green, natural, leafy, fresh, strong. Imparts natural fresh nuance to fragrance accords.
Strawberry Pure	Fruity-strawberry, strong. Used in floral blends such as jasmine and rose.
Syringa Aldehyde	Strong, floral-green, sweet. Used as top notein lilac, hyacinth and rose.
Tanisone	A powerful herbaceous fragrance tinged with a discreet frutiness.
Tangerinol	Citrus, fresh, fruity, bitter. Blends well with frean and sparkling mixtures.
Tetrahydro Linalool	Citrus, agrestic, floral, fresh. A modifier in floral accords - lily, rose, lilac.

Tetrahydro Linalyl Acetate	Citrus, agrestic, fresh, floral, fruity, dry. Used bergamot lavender, floral.
Tetrahydro Para Methyl Quinoline	Powerful, animalic, civet-like. As a trace in civet base and oriental blends.
Toscanol	Anisic, sweet-spicy. Sweet spicy note of estragole (Methyl Chavicole).
Undecatriene 10 %	Intense, galbanum, green, herbaceous. As trace green note in a formula.
Undecavertol	Floral-green, violet-like, fresh. A leaf note of lily-of-the-valley.
Velvione	Musky, powdery, slightly animalic. A strong stable musk type fragrance.
Verdantiol	Linden-Orange Flower. Offers intense floral note to delicate floral blends.
Vern Aldehyde	Natural, green, agrestic, fresh, aldehydic. Has mountain air character.
Vetynal Extra	Woody, dry, earthy. Used to provide woody note to sandal & woody odors.
Zingerone	Spicy, pungent, characteristic of ginger. Provides spicy notes to fragrances.

Anupam s Product Catalog

Givaudan Roure Fragrances

Acetate PA	Fruity, pineapple, fresh, green.	GR
Adoxal	Fresh, floral, rose, marine.	GR
Alcohol C - 11	Fresh, citrus, waxy.	GR
Aldehyde C - 6	Aldehydic, fatty, green.	GR
Aldehyde C - 9	Aldehydic, fatty, rosy, citrus.	GR
Aldehyde C - 11	Floral-green, rose citrus, aldehydic.	GR
Aldehyde C - 11 Iso	Aldehydic, green, rose.	GR
Aldehyde C - 12 MNA	Aldehydic, dry, amber, warm.	GR
Aldehyde C - 110 Undecylic	Aldehydic, citrus-peel, fatty, diffusive.	GR
Allyl Cyclo Hexyl Propionate	Fruity, green.	GR
Ambrettolide	Musk, warm, ambrette-seed, fruity.	GR
Amyl Benzoate	Floral-green, musk amber, balsamic.	GR
Amyl Butyrate	Fruity, sweet apricot-banana.	GR
Anisyl Acetate	Floral-anisic, fruity, balsamic.	GR
Berryflor	Fruity, floral-anisic, fresh, balsamic.	GR
Butyl Quinoline Secondary	Leather, green, woody, earthy.	GR
Celery Ketone	Herbaceous, spicy, celery.	GR
Cetone V	Fruity, floral-green, woody.	GR
Cuminic Aldehyde	Spicy, animalic, herbaceous.	GR
Decatone	Citrus, woody, fresh, fruity.	GR
Decenal 4 Trans	Aldehydic, orange, green, floral.	GR
Di Hydro Beta Ionone	Woody, floral, orris, amber.	GR
Di Methyl Anthranilate	Orange flower, mandarine.	GR
Di Methyl Benzyl Carbinol	Floral, rose, green, oily.	GR
Di Methyl Benzyl Carbinyl Acetate	Fruity, floral, jasmine, herbal.	GR
Di Methyl Octenone	Citrus, fresh, fruity.	GR
Dimetol	Lavender, citrus, floral, woody.	GR

Ebanol	Sandalwood, musk.	GR
Ethyl Linalool	Fresh, floral, rich.	GR
Evernyl	Oakmoss, woody, phenolic.	GR
Florhydral	Floral-green, muguet, fresh.	GR
Folione	Green, leaf, floral.	GR
Folrosia	Rosy, green, slightly woody-earthy.	GR
Freskomenthe	Fresh, cool mint, agrestic, woody.	GR
Givescone	Rosy, spicy, fruity, woody.	GR
Glycolierral	Floral-green, milky.	GR
Irisone Alpha	Floral, orris, violet, woody.	GR
Irisone Pure	Floral, orris, violet, fruity.	GR
Irone Alpha	Floral, orris, woody.	GR
Iso Cyclo Citral	Fresh, green, herbaceous.	GR
Iso Jasmone B 11	Floral, warm, herbaceous, jasmine.	GR
Iso Raldeine 70	Floral, orris, woody, fruity.	GR
Iso Raldeine 95	Floral, orris, woody, fruity.	GR
Jasmonyl LG	Jasmine, lactonic, mushroom.	GR
Jasmone CIS	Floral-green, jasmine, warm.	GR
Kephalis	Woody-ambery, tobacco.	GR
Lemonile	Intense, lemon, cologne.	GR
Lilial	Floral-muguet, fresh.	GR
Lime Oxide	Citrus, lime, fresh, green.	GR
Linalool Oxide	Fresh, sweet, woody, floral.	GR
Linalool Synthetic	Sweet, floral.	GR
Linalyl Acetate	Bergamot-lavender.	GR
Linalyl Propionate	Lavender, citrus-bergamot, fruity.	GR
Madrox	Woody, tobacco, amber, warm.	GR
Melonal	Green melon, cucumber.	GR
Methyl Anthranilate	Fruity, grape, floral, orange.	GR
Methyl Heptenone Pure	Citrus, lemongrass.	GR
Methyl Ionone	Woody, floral, violet.	GR
Methyl Octyne Carbonate	Floral-green, violet, leaf.	GR
Methyl Pamplemousse	Fresh, citrus, grapefruit peel.	GR
Methyl Tuberate Pure	Lactonic, floral, tuberose.	GR
Nectaryl	Peach, fruity, apricot, lactonic.	GR
Nonadienal	Intense, green, violet leaf, cucumber	GR

Okoumal	Woody-ambery, tobacco, musk.	GR
Orange Crystals	Orange flower, honey, sweet.	GR
Orcinyl 3	Oakmoss, sweet, phenolic.	GR
Oxyoctaline Formate	Woody.	GR
Phenyl Acetaldehyde 85 % PEA	Green, floral, sweet.	GR
Sandalore	Sandalwood, warm, sweet.	GR
Spirambrene	Woody-ambery, spicy, aldehydic.	GR
Stemone	Green, leafy, fresh.	GR
Strawberry Pure	Fruity-strawberry.	GR
Tangerinol	Citrus, fresh, fruity, bitter.	GR
Tetra Hydro Para Methyl Quinoline	Animalic, civet.	GR
Undecatriene 10 %	Intense, galbanum, green, herbaceous.	GR
Undecavertol	Floral-green, violet, fresh.	GR
Velvione	Musk, powdery, slightly animalic.	GR

China Perfumer s On Line Catalog

Givaudan Fragrance Corporation

Adoxal
Alcohol C 11 Undecylenic
Aldehyde C 10 Decylic
Food Grade
Aldehyde C 6 Hexylic Food Grade
Aldehyde C 9 Nonylic Food Grade
Aldehyde Iso C11
Aldehyde C 11 Undecylenic
Aldehyde C 12 Lauric
Aldehyde C 12 MNA Pure
Aldehyde C 110 Undecylic
Allyl Cyclo Hexyl Propionate
Ambrettolide
Anisyl Acetate
Anisyl Alcohol
Apple Juice Givco 223
Aurantiol Pure

Base 3
Bergamot Givco 104
Berryflor
Birch Leaf Givco 166
Bisabolene
Black Agar Givco 215
Boisiris
Butyl Quinoline Secondary

Castoreum Givco 116
Celery Ketone
Cetonal
Cetone Alpha
Cetone V
Civette Givco 208
Cyclal C
Cyclamen Aldehyde Extra

Decatone
Decental-4-Trans
Di Hydro Ambrate
Di Hydro Ionone Beta
Di Methyl Anthranilate
Dimethyl Anthranilate
Dimethyl Octenone
Dimetol
Dossinia Givco 167 PMF

Ebanol
Ethyl Linalool
Ethyl Linalyl Acetate
Ethyl Methyl-2-Butyrate
Evernyl

Florhydral
Folione
Folrosia
Freskomenthe

Galbanum Givco 121
Geranitrile T
Geranium Givco 222
Geranodyle
Geranyl Acetone
Givescone
Glycolierral

Grapefruit S Givco 230
Green Ivy Givco 168
Green Tea Givco 228

Homofuronol

Honeyrose Givco 219

Indolene
Ionantheme 100 %
Ionone Beta
Iris Givco 204/2
Irisone Alpha
Irone Alpha
Iso Butyl Quinoline - 2
Iso Jasmone B11
Iso Propyl Methyl-2-Butyrate
Iso Jasmone B 11
Iso Propyl Methyl-2-Butyrate
Israldeine 70
Isoraldeine 95

Jasmin Etoile Givco 144
Jasmone CIS
Javanol

Kephalis

Labienoxime 10 %
Lemarome N

Lemonile
Lilial
Limetol
Linalool Oxide
Linalool Synthetic
Linalyl Acetate Synthetic
Linalyl Benzoate
Linalyl Formate
Linalyl Iso Butyrate
Linalyl Phenyl Acetate
Linalyl Propionate
Lindenblossom Givco 151 PMF

Madrox
Mamey Givco 200
Melonal
Methyl Anthranilate Extra
Methyl Camomille
Methyl Heptenone Pure
Methyl Laitone 10 %
Methyl Octyne Carbonate
Methyl Pamplemousse
Methyl Tuberate Pure
Myraldyl Acetate

Nectaryl
Neofolione
Nonadienal

Oakmoss Givco 214
Okoumal
Oranger Crystals
Orangia Givco 213
Oricnyl 3
Oxyoctaline Formate

Peonile
Pharaone 10 %
Purple Givco 226
Pyralone

Radjanol
Raldeine A GV
Rose Givco 217
Rose Oxide Racemic

Sampaquita Givco 138
Sandalore
Sandalwood Givco 203
Sandec Givco 220
Sandela
Silvial
Spirambrene
Stemone
Strawberry Pure
Syringa Aldehyde

Tangerinol
Tangeis Givco 212
Tetrahydro Linalool
Tetrahydro Linalyl Acetate
Tetrahydro Para Methyl Quinoline
Tomato Leaf Givco 224
Toscanol
Tropifruit Givco 205

Ultrazur
Undecatriene 10 %
Undecavertol

Velvione
Verdantiol
Vernaldehyde
Vert De Cassis Givco 180
Vetynal Extra

Ylang Givco 225

Zingerone

Aroma Chemicals

Current Product Offering

Fragrance Ingredient	Aroma Description
Acetal CD	Floral, green, honey like, rosy.
Adoxal	Fresh, aldehydic, powerful, floral, rosy, marine.
Alcohol C 11 Undecylenic	Fresh, citrus, slightly waxy.
Alcohol C 9 Nonylic	Floral, rosy, fatty, citrus like.
Aldehyde C 10 Decylic Food Grade	Powerful, waxy, aldehydic, orange character, citrus peel.
Aldehyde C 110 Undecylic Food Grade	Aldehydic, citrus peel, fatty, diffusive.
Aldehyde C 11 Undecylenic Food Grade	Powerful, aldehydic, floral-green, rose-citrus.
Aldehyde C 12 Lauric Food Grade	Aldehydic, intense, woody, fresh and clean.
Aldehyde C 12 MNA Pure	Aldehydic, dry, amber, warm.
Aldehyde C 6 Hexylic Food Grade	Aldehydic, fatty, green, powerful.
Aldehyde C 9 Nonylic Food Grade	Aldehydic, powerful, fatty, rosy-citrus.
Aldehyde Iso C 11	Aldehydic, green, rosy, powerful.
Allyl Cyclohexyl Propionate	Fruity, green, powerful, linear.
Amberketal IPM	Ambery, dry, woody.
Ambrettolide	Musky, powerful, warm, ambrette seed, fruity.

Ambrofix	Ambery, woody, tobacco, dry.
Anisyl Acetate	Floral-anisic, fruity, slightly balsamic
Anisyl Alcohol	Floral-anisic, herbaceous, powdery.
Aurantiol® Pure	Floral, orange flower, linden-blossom.
Berryflor®	Fruity, floral, fresh, balsamic.
Bisabolene	Balsamic, sweet, myrrh, orange flower.
Boisiris	Woody-ambery, orris.
Butyl Quinoline Secondary	Leather, Ggeen, woody, earthy, powerful.
Celery Ketone	Herbaceous, spicy, celery
Cetonal®	Orris, woody, powerful.
Cetone V	Fruity, floral-green, woody, powerful.
Citral Lemarome® N	Citrus, lemon.
Cyclal C	Green, leafy, floral, powerful.
Cyclamen Aldehyde Extra	Floral, green, powerful.
Decatone	Citrus, woody, fresh, fruity.
Decenal-4-Trans	Aldehydic, orange, green, floral.
Dihydro Ambrate	Woody-ambery.
Dihydro Ionone Beta	Woody, floral, orris, slightly ambery, fruity.
Dimethyl Anthranilate	Orange flower, mandarine, neroli like.
Dimethyl Octenone	Citrus, fresh, fruity.
Dimetol®	Lavender, citrus, fresh, floral, woody.
Ebanol®	Sandalwood, musk aspect, powerful.

Ethyl Linalool	Fresh, floral, rich.
Ethyl Linalyl Acetate	Fresh, floral, bergamot, fruity, pear like
Ethyl Methyl-2-Butyrate	Fruity, green, apple peel, pineapple skin.
Florhydral®	Floral-green, muguet, fresh, powerful.
Folione®	Powerful, green, leaf like, floral.
Folrosia®	Rosy, green, slightly woody-earthy.
Freskomenthe®	Fresh, cool mint, agrestic, woody aspect.
Geranodyle	Geranium, rosy, fruity.
Givescone®	Rosy, spicy, fruity, woody.
Glycolierral	Soft floral-green, milky, reminiscent of ivy leaves, woody.
Ionantheme 100%	Floral, orris, sweet, violet like, fruity, powdery.
Ionone Beta	Floral, orris, fruity, woody.
Irisone® Alpha	Floral, orris, violet like, woody.
Irisone® Pure	Floral, orris, violet like, fruity, woody.
Irone Alpha	Floral, orris, woody.
Isobutyl Quinoline-2	Leather, woody, powerful.
Isojasmone B 11	Floral, warm, jasmine like, herbaceous.
Isopropyl Methyl-2-Butyrate	Fruity, pear like, pineapple, green, fresh, diffusive.
Isopropyl Quinoline	Leather, woody, moss.
Isoraldeine® 70	Flowery, orris, woody, fruity.
Isoraldeine® 95	Flowery, orris, woody, fruity.
Isoraldeine® Cetone Alpha	Orris, woody, with a powdery background.

Jasmone Cis	Floral-green, jasmine, warm.
Jasmonyl® LG	Jasmine, lactonic, mushroom.
Javanol®	Sandalwood, creamy, rosy, powerful.
Kephalis	Rich, warm, woody-Ambery, tobacco.
Labienoxime 10% IPM/TEC	Blackcurrant, grapefruit, green, sage flower, powerful.
Lemonile®	Intense, lemon, cologne.
Lime Oxide	Citrus, lime, fresh, green, agrestic, powerful.
Limetol	Fresh camphoraceous, woody, cineole-lime like.
Linalool Oxide	Powerful, fresh, sweet, woody, floral.
Linalyl Benzoate	Floral, tuberose like.
Linalyl Cinnamate	Floral, fruity, balsamic, sweet.
Linalyl Formate	Citrus, green, bergamot like.
Linalyl Isobutyrate	Fruity, fresh, lavender.
Linalyl Propionate	Lavender, citrus-bergamot like, fruity.
Madrox®	Woody, tobacco, ambery, warm.
Melonal	Powerful, green, melon, cucumber like.
Methyl Anthranilate Extra	Floral, neroli, warm, sweet.
Methyl Camomille	Aromatic, fruity, floral.
Methyl Diantilis®	Spicy, carnation, sweet, vanilla.
Methyl Heptenone Pure	Citrus, lemongrass.
Methyl Laitone 10% DPG	Lactonic, creamy, coconut milk, coumarin like, powerful.
Methyl Octyne Carbonate	Floral-green, violet, Leaf like.

Methyl Pamplemousse	Fresh, citrus, grapefruit peel like, with a vetiveryl acetate aspect.
Methyl Tuberate Pure	Lactonic, floral, tuberose.
Myraldyl Acetate	Flowery, jasmine, sweet, fruity, green.
Nectaryl	Peach, fruity, apricot, lactonic.
Neofolione	Green, floral, fresh, powerful.
Nonadienal	Extremely intense, green, violet leaf, cucumber, melon.
Nonadienol	Powerful, green, herbaceous, melon.
Okoumal®	Woody-ambery, tobacco, musky.
Oranger Crystals	Orange flower, honey, sweet.
Orcinyl 3	Oakmoss, sweet, phenolic.
Oxyoctaline Formate	Woody, powerful.
Peonile®	Floral, geranium, grapefruit, fresh
Pharaone 10%	Green, pineapple, fruity, herbaceous.
Pyralone	Leather, green, woody, powerful.
Raldeine® A GV	Flowery, orris, woody, fruity.
Safraleine™	Leathery, spicy, woody, warm.
Sandalore®	Sandalwood, warm, sweet.
Sandela®	Woody, balsamic, sandalwood.
Silvial®	Powerful, floral-muguet, fresh.
Spirambrene	Woody-ambery, spicy, aldehydic, powerful.
Stemone®	Green, natural, leafy, fresh, powerful.
Strawberry Pure	Fruity-strawberry, powerful

Syringa Aldehyde	Strong, floral-green, sweet.
Tangerinol	Citrus, fresh, fruity, bitter.
Tetrahydro Citral	Citrus like, fresh, aldehydic, sweet.
Tetrahydro Para Methyl Quinoline	Powerful, animalic, civet like.
Toscanol®	Aniseed like, green, liqueur like, herbaceous.
Undecatriene 10%	Intense, galbanum, green, herbaceous.
Undecavertol	Floral-green, violet like, fresh.
Velvione®	Musky, powdery, slightly animalic.
Verdantiol	Linden-orange flower.
Vernaldehyde®	Natural, green, agrestic, fresh, aldehydic.
Zingerone	Spicy, pungent, ginger.

Specialty Bases

The Bases

Fragrance Ingredient	*Aroma Description*
Apple Juice Givco 223	Fruity, fresh, red apple.
Bergamot Givco 104	Citrus, fruity, bergamot oil.
Birch Leaf Givco 166	Green, herbaceous, vegetable.
Black Agar Givco 215	Woody, ambery, olibanum.
Castoreum Givco 116	Animal, leather, castoreum extract.
Civette Givco 208	Animal, warm, musky, civet like.
Dossinia Givco 167 PMF	Sweet floral, green.
Galbanum Givco 121	Galbanum, green, bitter, vegetable.
Geranium Givco 222	Geranium, minty, herbaceous, rosy.
Grapefruit S Givco 230	Grapefruit oil.
Green Tea Givco 228	Green, leafy, floral.
Honeyrose Givco 219	Honey, rose, sweet.
Kumquat HS Givco 181/3	Citrus, fruity, green.
Lemon Givco 112/2	Lemon, powerful.
Lindenblossom Givco 151 PMF	Floral, green, fresh, lily-of-the-valley.

Oakmoss Givco 214	Oakmoss, woody.
Orange Power Givco 229	Orange, aldehydic, fruity, powerful.
Orris Givco 204/2	Orris absolute, floral, woody, powdery.
Rose Givco 217	Rose.
Sampaquita Givco 138	Jasmine, fruity.
Sandalwood Givco 203	Sandalwood.
Tangeris Givco 212	Citrus, green.
Tomato Leaf Givco 224	Green, sparkling, fresh, vegetal, bitter.
Tropifruit Givco 205	Fresh, tropical fruit, radiant.
Ultrazur	Fresh, ozonic, citrus, slightly ambery.
Vert de Cassis Givco 180	Fruity, green, vegetable.
Ylang Givco 225	Floral, spicy, sweet, ylang ylang.

Quest International

About Us

Leading In Creativity

Quest is one of the world's most creative flavour and fragrance companies.

We combine science with art to create many of the world's best-known scents and tastes for products as diverse as perfume and lipstick to soups and soft drinks.

Scientific research has given us many answers. It has helped to develop a whole range of components inspired by nature. Plus totally new ones.

A deep understanding of local consumer preferences and high level sensory analysis expertise are a major source of competitive strength.

We have activities in more than 30 countries and employ over 3,500 people.

Innovations

We have spent years investigating how to stimulate the senses. So if it is an intoxicating scent or a delectable taste sensation you are looking for, tap into our creativity and sense the world of Quest.

A mix of art and science delivers winning solutions

Breakthrough Perfumery blending profound creative talent with the latest technological advances.

Quest's perfumers are at the heart of the fragrance development process. Their imherent creativity is supported by acute sensory perception, technical understanding and awareness of consumer preferences. Like talented artists, they use a palette of unique ingredients to construct new fragrances.

Miriad

An award-winning creative tool, acknowledged for its ability to drive the fragrance industry forward.

How does Quest create fragrances that are truly innovative, yet deliver superior consumer acceptance? The answer, in part, lies within Miriad™, Quest's state-of-the-art interactive 'fragrance environment'.

Houses a suite of tools that investigates the relationship between consumer preferences, lifestyle trends, brand positionings and market longevity. The results speak for themselves. Many of Quest's fragrances have endured through a time of eroding brand loyalty and great market flux.

WE USE THE METAPHOR OF A FLOWER TO ILLUSTRATE THE VARIOUS COMPONENTS OF MIRIAD™. SOME OF THE KEY TOOLS ARE AS FOLLOWS:

> Research and Development - enabling Quest to discover and develop new ingredients, boost perfume performance and deliver an array of functional benefits through novel application solutions.
>
> Our sensory ideas come in the form of innovative flavours and fragrances along with insights into brands and what makes them tick.

Lignes de Force

Can you imagine what a fragrance looks like? We can.

Lignes de Force™ is a powerful visual representation of odour that enables Quest to analyse markets, brands and emerging trends. It is also a compelling educational tool, explaining the history of perfumery, provenance of raw materials and how they are extracted for use in fragrance creation.

In terms of visualizing fragrance, we can represent materials from the 14 olfactive families through a series of coloured concentric rings. The concentration of particular ingredients in a perfume can be shown by varying the thickness of the ring.

Perfume Pulse

What do you think of when you smell freshly mown grass?

To a Brazilian or French woman the smell of new mown grass conveys nature as well as freshness and is a relatively simple reference point. However, to an American it has the more emotional connotations of care-free youth; specifically bright and happy, it holds visions of well-manicured parks and children playing. In Indonesia it is different again.

Futurology

EYES WIDE OPEN

Quest's Futurology programme was designed to do more than just examine new materials, fragrances and the fragrance market as they exist today. By working with leading futurists, textile forecasters and other experts, our perfumers are able to identify the latest trends, which are then used as inspiration for new fragrances.

Global Business

A dynamic and rewarding organization.

Quest's fragrance business creates and produces fragrance compounds and materials, cosmetic ingredients and dental flavours for use in a wide range of consumer products.

The fragrance business employs approximately 1500 people worldwide, with creative centres in eight countries and sales offices in over 30 countries. Our team includes 60 perfumers worldwide.

Fine Fragrances

With creative centres in Paris, New York and São Paulo our fine fragrance team creates some of the world's leading scents for internationally renowned fragrance houses and fashion designers.

Personal & Home Care

Creative centres in France, the UK, the USA, Brazil, Indonesia, Japan, and the Netherlands collaborate to design fragrances for bath and shower products, hair care, deodorants and antiperspirants, laundry detergents, fabric softeners, household cleaners & air care products.

Oral Care Flavours

A dedicated team of flavourists leads Quest's Oral Care Team. Based in the UK, this group has the long-standing distinction of being the world's top dental flavour supplier. For more information, click here.

Cosmetic Ingredients

Inspired by nature's very own active materials, the Ashford-based group has developed a growing portfolio of ingredients to enhance both skin and hair care products. For more information, click here.

Fragrance Ingredients

Quest designs and manufactures novel and functional fragrance ingredients, which are sold to third parties in the worldwide fragrance industry. Visit our Perfumers Compendium at:

//compendium.questintl.com

www.perfumerbook.com

www.chinaperfumer.com

Quest International Perfumer s Compendium

Abricotal FM 1198	Juicy, sweet fleshy apricot peach.
Acetanisole Crystals	Intense sweet rough hay like with floral note.
Acetyl Cedrene FIC	Warm, amber musky.
Animalis AB 1633	Woody, musky, animalic fantasy.
Anther	Green spring flowers reminiscent of floral hyacinth.
Apple AB2786	A crisp juicy green apple, woody background, floral on dry out.
Apple Blossom FM243	Is a fresh building block base of apples.
Applinal	Strong, sweet with a warm woody balsamic background, apple.
Arboroma	Rich, patchouli, vetiver florality.
Argudor AB600	Lemon.
Azarbre	Tobacco, violet orris, sweet honey on dry down.
Bangalo	Powerful sandalwod, floral.
Bay Oil Nardenised	Highest quality deterpenised oil.
Benzaldehyde	Powerful, sweet bitter almonds.
Benzyl Acetate Coeur	A richer, softer jasmin.
Benzyl Iso Eugenol Forte	Sweet, balsamic, floral with aspects of carnation and magnolia.
Benzyl Propionate	Soft, sweet fruitier than the acetate.

Bergamot Oil Reconstructed	Juicy, natural reconstitution.
Black Cummin C2738	Has a smoky, woody medicated odor works well in mens fragrances.
Blackcurrant C2758	A powerful odour of blackcurrant juice.
Black Pepper Roasted C2558	Has a nutty aspect useful in flavors where a nut odor is needed.
Bois De Rose Syn AB2034	Excellent substitute for bois de rose oil.
Bourgenal	A powerful muguet floral note.
Calyxol	Inexpensive, soft, honeysuckle.
Cardamon Guatemalan C1536	A beautiful product very close in odour to the botanical.
Cassandra FM1065	Fresh, herbal, tropical fruit bouquet, with staying power.
Cassis AB2967	Fresh, with a touch of natural greeness.
Castorium Abs. C’Less	Strong and warm resembles birch tar oil, leather like.
Cedar English	Dry warm, amber reminiscent of english cedarwood.
Cervolide	Exalting sweet and tenacious musk lasts several months.
Chandilyn AB1513	Contains bangalol and is more musky, balsamic.
Chocovan FM1197	Is sophisticated version more in a cocao direction of iso butavan.
Cistulate	Fresh, natural pine fruity with rosemary and sage aspects.
Cistus Abs. French MD	Powerful sweet balsamic, typical labdanum odor.
Citral X Litsea	Powerful, fresh top note, lemon.
Citrathal	Distinctive fresh lemon lime lasts one day.
Citrathanil ABQ 7023	Is more green floral and tenacious lemon then agrudor.
Citrofuran AB5531	Is a more lavandacious citrus complex containing rhubafuran.
Citonellyl Nitrile	A green rose like scent almost reminiscent of citralva.

Citrowood ABQ7021	Is a fresh citrus, woody base built around frutonile.
Civet AAB 394	Fine substitute of the original absolute.
Civet AB422A	Excellent reconstitution long lasting.
Civet Abs. 394 BF	An extremely powerful obnoxious animal like fecal odor.
Clove Bud Abs.	An intensely warm powerful sweet clove spicy odor.
Cornexi FM105	Rich, walnut fantasy base with spicy herbaceous background.
Costus Oil Synthetic AB2994	Outstanding synthetic costus oil lasts several weeks.
Costus Oil Syn AB5917	A lower cost costus base.
Cressanther	Powerful watercress lasts a few weeks, green.
Cucumber C2358	Extracted from fresh whole cucumbers the process maintains the integrity of the aroma.
Cumin Nitrile	Cumin, less pungent than the aldehyde but more stable.
Curional FM1278	Smooth amber, mossy woody, leather.
Cyclambrene ABQ7044	Warm, amber musky and more sophisticated than acetyl cedrene.
Damas Rose FM1248	Is very damascone rose directed.
Decumal AB772	Soft honeysuckle that has more peach character then calyxol.
Decyl Acetate Rectified	Fatty, sweet pineaple waxy, rosy.
Dewfruit ABQ2977	Exotic bouquet, lichees, raspberries, herbal greeness.
Di Hydro Eugenol	Chemically more stable than eugenol.
Di Hydro Jasmone	Fruity sweet floral woody with a powdery nuance.
Di Hydro Myrcenol	Cologne fresh floral lavender lasts several hours.
Di Hyro Myrcenol Acetate	Sparkling, fresh lime, lavender lasts one hour.
Dorina SA	Diffusive, floral rose possessing a fresh dewy petal & green leaf note.

Dupical	Intense diffusive aldehydic aspects and long lasting use up 10 %.
Efetaal	Fresh, green floral muguet lasts several hours.
Elintaal	Natural, fresh herbal character of muguet.
Elintaal Forte	Is a broader cut version and hence more cost effective.
Epitone FM1298	More powerful sophisticated spicy balsamic and amber, felvinone.
Ethyl Safranate	Powerful natural damascone apple rose.
Eugenol	Powerful warm spicy balsamic.
Evernia AB454	Novel, mossy complex green floral undertones.
Evernia AB454A	Novel, mossy complex green floral undertones at a lower cost.
Evernia AB454B	This version contains more colour stable mosses then above.
Felvinone	Spicy, balsamic and amber.
Fenugreek	Intensely sweet and root like odor.
Floralyn	A clean mild floral odor with a slight peppery dry out.
Floranyl AB256	Fresh, soft rosy with aldehydic muguet aspects.
Florivert ABQ7046	Is a more sophisticated version of efetaal lasts a few days.
Florosa	A light sweet green floral.
Florosa Q	Aspects of hydroxycitronellal with rosy overtones no restrictions.
Frescile	Powerful, orange green ozone lasts several days.
Fresh Bread C2832	Extracted with CO2 and ethanol this was an exceptionally true rendering of steam baked bread.
Fruitlise AB876	Juicy, floral tropical fantasy bouquet.
Frutonile	Very tenacious, soft fruit character, floral background.
Galbanum FM1178A	Heart of galbanic character lasts several days.

Galbanum FM1300	Excellent substitute lasts several days.
Garvetone ABQ5739	Is a more powerful floralised base built around gardamide.
Geraniol For Soap AB2015	Economical sweet rose base in lieu of geraniol last several days.
Geranium Oil Syn ABQ5629	Excellent substitute, interesting fruity and rosy nuances.
Geranofix AB751	Sweet green geranium rose, best used in 10 % dilution.
Ginger Chinese C2130	Has true ginger aroma. The ginger root of Chinese origin contains citral, which gives the extract a zesty lemon tang.
Ginger Chinese C2470	Further treated by molecular distillation to give a product lighter in colour than the standard extract.
Gloria ABQ 7022	Is a more citrusy fantasy base with a musky dry down.
Grapefruit Oil Nardenised	A tingling, fresh deterpenised oil lasts several weeks.
Gyrane	Radiant, fresh green and rosy lasts several days.
Heptavert	A green woody odor.
Heptavert ABS 7079	Is a more green woody sophisticated form of florane, rose.
Heptyl 2 N Cyclopentanone	Powerful, latonic, herbaceous floral jasmin.
Herbafruitate OM364	Is a sophisticated quality of enhanced power and tenacity.
Herboxane	Herbal camomile lasts a few hours.
Hexyl Benzoate	Fruity top note balsamic dry down.
Hydroxycitronellal Sub AB2040	A substitute with unrestricted use which lasts a few weeks.
Ionone	Warm, balsamic, violet floral.
Iononyl Acetate	Fruity top note, characteristics of linalyl and terpinyl acetate.
Iononyl Formate Extra	Powerful herbal floral.
Iso Eugenol	Mild and sweet deep floral carnation like.

Iso Eugenol Sub. AB655	Unrestricted substitute for natural iso eugenol.
Iso Jasmone Pure	Powerful, latonic, celery - jasmin.
Iso Longifolanone	Fresh woody dry amber.
Jacinthflor ABQ4581	Is a more complete spring floral bouquet built around efetaal.
Jasilyn	Similar to jasmopyrane forte, but longer lasting.
Jasmacylene	Low cost, fresh diffusive green, woody anise, herby, - jasmin.
Jasmatone	Diffusive, warm spicy celery, with a hint of fruitness - jasmin.
Jasmin AB13	Economical but tenacious base with a fruity top note.
Jasmin AB410	Long lasting, absolute note of floral jasmin.
Jasmin Egyptian C2612	Prepared by molecular distillation of the jasmin concrete. This product exhibits a very fine top note, the low temperature trap captures the most volatile components.
Jasmopyrane	Rich, waxy, sweet floral jasmin complex.
Jasmopyrane Forte	More tenacious floral jasmin and has a slight mushroomy note.
Kiwi AB2163	Fresh floral green watery melon, kiwi fruit on dry out.
Leather Base FM1064	Fine leather goods, woody, animalic undertones.
Leather Base FM1064B	More economical quality less costly then Leather Base FM1064.
Laevo Carvone	Warm, diffusive spicy spearmint.
Lemongrass Oil Nardenised	Lemon fresh, deterpenised oil lasts a few days.
Lemon Oil Sythetic	Low cost reconstitution lasts one day.
Ligustral	Powerful, fresh cut grass best used in 10 % dilution.
Liguvert ABQ7061	Is a more floral complex containing ligustral.
Lime AB402	Sweet yet sharp lasts a few weeks.

Lime Oil Nardenised	Sweet, pure deterpinseed oil with petitgran character on dry out.
Limettal ABQ5701	Tingling, fresh floral aldehydic, long lasting.
Litsea Cubeba Nardenised	Sweet fresh, deterpenised oil, herby aspects of french verbena.
Lixetone	Rich, sweet, warm amber with a musky background.
Lixetone Coeur	Is richer and fuller then lixetone.
Macel	Intense, fresh spicy, nutmeg aspects a natural wet, green tree.
Mandarin AB646	The juicy zest base is built around citrathal.
Manzanate	Powerful over ripe natural apple best used in 10 % dilution.
Melon AB5304	Fresh, green juicy natural ripe character on dry down.
Methyl Cedrylone	Rich and sweet cedar.
Methyl De Hydro Jasmonate	Soft, radiant, smooth small % gives blend radiance, body and warmth.
Methyl Ionone	Warm, woody floral violet lasts several days.
Methyl Ionone Alpha Iso	Floral, violet, isomeric mixture.
Methyl Ionone Beta	Woody warm odor.
Methyl Myristate	Faint oily, violet, honey undertones.
Methyl Octine Carbonate Sub	An unrestricted and safe replacement.
Moss AB311	Powerful, decolorized moss.
Moss AB311D	Contains more colour stable mosses.
Mousse De Mer FM 1062	Effervescent, fresh, sea moss, interesting whiskey and ginger note.
Musk Abs. C ’ Less	An animal musky odor powerful and intense.
Musk Ambrette Substitute	Reminiscent of musk ambrette.
Musk R - 1	High quality, diffusive, slightly fruity.

Nacyntha ABQ7043	Green spring floral more sophisticated version of anther.
Nardozeste ABQ5031	Powerful, dry lemon peel note.
Neo Bergamate	Powerful floral fresh herbaceous lavender.
Neo Bergamate Forte	The forte quality is a more economical broader cut.
Neo Lavandate ABQ7042	Fresh, fruity floral, herbaceous lavandin.
Neroli AB78	Cost effective long lasting substitute for natural material.
Oceanil FM1279	Powerful, marine complex with a modern floral background.
Oceano FM1286	Fresh, herbaceous, sea food like very diffusive.
Octyl Acetate	Slightly fatty, with rosy, green and woody undertones, apple.
Orange Oil Nardenised	A beautiful sweet, deterpenised oil.
Ortholate	Inexpensive fresh woody apple.
Ozonal AB7203	Fresh, sea breeze, fantasy base mellowed by delicate floral.
Para Tertiary BCHA High CIS	Dry camphoraceous.
Patchouli MD C15105	Here molecular distillation of patchouli oil removes all the iron contamination and excessive colour to give a fine product with a good odour profile.
Patchouli Oil Acid Washed	Iron free to dispel discolouration problems.
Patchouli SUB AB4927GMY	Reminiscent of natural patchouli.
Patinol AB286	Is more geranium rosy in character then geranofix.
Peach AB650	A radiant long lasting peach with a hint of green.
Peach Blossom FM1242	Has a fresh floral base centered around the sweet peach.
Pear AB2221	Sweet, juicy ripe flesh of the pear.
Pelargene	Powerful crushed leaves and rosy geranium lasts a few weeks.

Penanol AB150	Is a more sophisticated form of inonyl formate extra, herbal.
Peony ABJ7098	Bouquet, sweet and spicy background of the floral peony.
Petilime FM1213	Citrus booster, sharp, lime peel, petitgrain background.
Petilyn	A very delicate and faint light green floral.
Petiole	Intensely green nasturtium leaves, with watercress notes.
Phenoxan	Is a tenacious herbaceous complex containing herboxane.
Phenoxy Ethyl Iso Butyrate	Sweet fruity rosy floral.
Phenyl Ethyl Acetate	Fine, sweet slightly green lasts a few days.
Phenyl Ethyl Alcohol Extra	Fine, smooth, more powerful quality lasts a few days.
Phenyl Ethyl Formate	Powerful, green watercress, rosy, chrysanthemum.
Pipertone	Powerful fresh minty camphoraceous odor.
Pivacylene	Soft, sweet powdery floral, peach lasts one week.
Precious Wood AB401	Is a rich woody floral base built around lixetone.
Prenyl Acetate	Natural green apple banana odor.
Prenyl Benzoate	Pleasant natural balsamic odor.
Raspberry FM1223	Powerful, juicy, confectionary sweet diffusive use 10 % solution.
Rhubacitril FM1020	Is a more rounded base built around rhubafuran.
Rhubafuran	Powerful diffusive green rhubarb grapefruit use in 1 % dilution.
Rosabella OM369	A base containing ethyl safranate its character is more rounded.
Rose AB380D	Rose absolute, slightly herbal animalic tones.
Rosania FM1018	Diffusive natural green geranium rose.
Rosemary C2599	Extract takes you right back to the herb and all its memories, which varied in the audience from walks in the sun drenched

	mediterranean coastline, to barbecued lamb under grey UK skies.
Rubafuran	Rhubarb, from the buckwheat family.
Sandalwood FM1068	Powerful sandalwood floral with a more nutty woody complex.
Sandalwood Oil Nardanised	A deterpenised oil of exhilerating power and quality.
Schiff Base Canthoxal	Canthoxal and Methyl Anthranilate floral powdery spicy mimosa note.
Schiff Base Decanal	Decanal and Methyl Anthranilate orange flower odor.
Schiff Base Muguet	Hydroxycitronellal & Methyl Anthranilate, lily of the valley odor.
Schiff Base Lilial	Lilial and Methyl Anthranilate, floral, neroli, orange blossom note.
Schiff Base Lyantion	Lyrantion, sweet sophisticated, orange blossom.
Sensient	A delightful reproduction of the templar that can add diffusiveness, and lift to many modern compositional themes.
Sino Citral	Fresh citral lemony with a floral background.
Sinocitril ABQ4020	Powerful aldehydic floral which has an enhanced tangerine character.
Sinodor	Almost odorless melodour counteractant.
Spinach C2733	A molecular distillation from the concrete. It reminded perfumers of other absolutes like violet leaf and jonquille. After several minutes reminiscent of spinach itself.
Strawberry AB4777	Delicious, natural, hint of green sweet creamy coconut dry down.
Stymonile ABQ7020	Is a zesty citrusy, radiant, ozone fresh complex.
Supravanil	Very powerful non discoloring vanilla.
Tanganil ABQ7078	Powerful aldehydic floral which has a more herbaceous character.
Tea Essence	Sweet, characteristically tea like, brown, hay like, tobacco leaf.
Top Jasmin ABJ5374	Authentic top note of natural jasmin that lasts a few weeks.
Top Muguet FM1244	Is a fresh, sparkling, green, lily of valley base containing florosa.

Top Rose ABQ5644	The top note of bulgarian rose oil lasts a few weeks.
Traseolide	Clean versatile tenacious.
Traseolide 100	Sweet musk.
Tree Moss Abs. C’Less M.D.	A powerful mossy type odor which lasts days on the blotter.
Tree Moss C ‘ Less L.C.	A diffusive tree moss woody odor.
Trideen 2 Nitrile	Strong radiating oily citurs note with good substantivity.
Verdalia A	Powerful, sweet, green herbaceous melon green on dry down.
Verdilyn	Similar to efetaal, but more robust and powerful lasts one day.
Verdoracine	Earthy, galbanic, carrot skin, green.
Vertlon	Mushroom, fruity melon freshness, green, lasts several days.
Vigorose ABQ5826	More sophisticated version of gyrane, fresh green geranium rose.
Wealdwood ABQ7019	A base built around arboroma with slightly more cedar.
Ylang Ylang Oil	Sweet floral and intesely floral.
Yuzuzest ABJ7091	Yuzu peel, mandarin, grapefruit with a tropical fruit background.

Anupam s Product Catalog

Quest International

Aquanol	Fresh marine, green, aldehydic, muguet.	Quest
Bangalol	Woody, sandalwood.	Quest
Bourgenal	Aquatic, floral, muguet, green.	Quest
Cervolide	Musk, fruity, woody.	Quest
Efetaal	Fresh, floral, hyacinth.	Quest
Empetal	Fresh, aldehydic.	Quest
Ethyl Safranate	Rose, apple, woody.	Quest
Florosa O	Floral-muguet, rose, lemon.	Quest
Gyrane	Geranium, fresh, rosy.	Quest
Heptone	Jasmine, floral, herbal, lactonic.	Quest
Jasmatone	Floral, jasmine, fruity.	Quest
Jasmopyrane Forte	Floral, jasmine, sweet, herbaceous.	Quest
Kalamanzest	Citrus, lemon, fresh, green.	Quest
Karnal	Woody, amber.	Quest
Ligustral	Green, fresh, floral.	Quest
Methyl Ionone Gamma	Woody, floral, violet.	Quest

China Perfumer s On Line Catalog

Quest International

9-Decenal
Acetyl Cedrene
Agrudor
Algol
Alicate
Allyl Amyl Glycolate
Amberlyn 50
Amberlyn Super
Ambrazone
Amyl Salicylate
Anther
Applinal
Aquanal
Aurantion
Avalone M
Azarbre

Balsapia
Bangalol
Beauvertate
Benzyl Acetate
Benzyl Iso Eugenol Forte
Benzyl Propionate
Benzyl Salicylate
Boskager
Bourggeonal
Buchurant

Calyxol
Camonile
Cappuccino
Cassandra
Cassis
Cervolide
Chocovan
Chrysanthal
Cinnamic Alcohol
Cinnamic Aldehyde
Cistulate
Citral Ex Litsea
Citral Lemarilla
Citrathal
Citrathal Conc. TW
Citrathal S TW
Citrofuran
Citronellyl Nitrile
Civet
Costus Oil Synth
Cressanther
Cumin Nitrile

Decyl Acetate Rectified
Dewfruit
Di Hydro Eugenol
Di Hydro Jasmone
Di Hydro Myrcenol
Di Hydro Myrcenyl Acetate
Dupical

Efetaal
Elintaal
Elintaal Forte
Empetal
Epiceller
Epitone
Ethyl Safranate

Felvinone
Fiorivert
Florane
Florocylene
Florosa
Frescile
Frutonile

Gardamide
Gardamousse
Gardocylene
Gyrane

Heptone
Herbanate
Herboxane
Hexyl Benzoate
Hexyl Crotonate
Hexyl Salicylate
Hydroxycitronellal Substitute

Iononyl Acetate
Inonyl Formate Extra
Ionone
Iso Butavan
Iso-Jasmone Pure
Iso Longifolanone

Jasmacylene
Jasmatone
Jasmin
Jasmopyrane

Jasmopyrane Forte
Jessate

Kalamanzest
Karamber
Karanal
L-Carvone
Levistamel
Ligantraal
Ligustral
Limettal
Lineval
Lyrantion 50 % DPG

Maceal
Manzanate
MDJ Super
Mefranal
Mefrosol
Melon
Methyl Ionone
Methyl Ionone Alpha Iso Super
Methyl Octine Carbonate Subst.
Mevantraal
Mousse De Mer
Musk R - 1

Nang - Karta
Neo Bergamate Forte

Oceanil
Oceano
Octa Hydro Coumarin
Octyl Acetate
Orris Questarome
Ortholate
Ozonal

Patchouli, Acid Washed
Peach
Pelargene
Petilyn
Petiole
Phenoxy Ethyl Iso Butyrate Beta
Phenyl Ethyl Acetate
Phenyl Ethyl Formate
Phenyl Ethyl Iso-Pentyl Ether
Pivacylene
Pivarose
Precious Musk

PTBCHA
PTBCHA High CIS

Quintone

Rhubacitril
Rhubafuran
Rosyrane Super

Seringone 50 % Benzyl Acetate
Shiro Choco
Silvanone Supra
Sinocitril
Sinodor

Tangenil
Tea Shop
Terpinyl Iso Butyrate Alpha
Tetrahydroconvalol
Tibetone
Top Rose
Traseolide
Tridecene-2-Nitrile

Ultravanil

Verdalia A
Verdilyn
Verdoracine
Vertelon
Vetiveryl Acetate Substitute
Vigorose
Vioris
Viotril
Yukuzest

Fibre2fashion

Switzerland

Fragrances Producer Givaudan Reopens its Perfumery School

Fragrances & flavours producing industrial group GIVAUDAN opened the doors to its Perfumery School to the media and specialised press on Wednesday 28th and Thursday 29th September, With almost 60 years of expertise in teaching the art of perfume-making, several generations of perfumers and Directors were present among the invitees.

The first day started with an introduction by Jean Guichard, the current Director of the Perfumery school and senior perfumer, who guided the visitors through the new buildings of the school which was officially opened on Friday 1st October.

Mr Hadorn (former Director) and Mr. Sokoloff (former vice-Director) of the Givaudan school, which was created in 1968 in Geneva, were also present. Representing more than 40 years of Givaudan's perfumery school memory, they impressed the audience with the anecdotes they related.

Mrs Françoise Marin, former Director of the Roure School during the 1990 and Bernard Escano who succeeded her, as guardian of the unique heritage this school represents, were impressed by the quality and passion for learning that the current students continue to perpetuate.

Jean Guichard explained to the journalists that before creating a perfume, it is very important to have the right technique. In fact the three main values of the school are passion, creativity and technique. He believes that his mission as Director of the school is to not only teach with passion, but also to translate and facilitate the understanding of the olfactory language.

In an interactive workshop, the Media with the help of students and junior perfumers could experience the first two years of instruction, as they were taught how to classify naturals and synthetics in their olfactory families and then had to identify accords and schemas.

Each region was represented by a perfumer, which allowed the audience to learn more about the cultural differences between consumers around the world. Nicolas Anorga, perfumer, compared his role to a translator, able to understand the consumer's language and turn it into an olfactory message.

The second day started with a Sonia Constant, junior perfumer, who had recently graduated. She

presented the fragrance she had created as part of her final exam and explained that this project had enabled her to develop her imagination while working within the constraints of a brief. The fragrance she created helped her to feel at ease when talking about her creation, by being able to tell an olfactive story.

To conclude the day's presentations, Frederic Rivoire, Head of Fine Fragrances Europe and Gilles Andrier, CEO of Givaudan, reminded all of the unique chance that this Perfumery school represents as a keystone of our industry, as a tailor-made training that encourages the future talents to guarantee tomorrow's innovation and as a solid reference anchored in Givaudan's heritage.

Swiss fragrance company Givaudan makes use of its strong product development and research capabilities, including one of the world's oldest perfumery schools, to serve a diverse and distinguished clientele, by creating fragrance and flavour compounds for a variety of products. Today, Givaudan is a science-smart, modern, and innovative company, with global reach and resources, well positioned to succeed in the twenty-first century.

Givaudan

Givaudan Fragrance Corporation

Switzerland

Givaudan Perfumery School

A Legendary Institute That Creates the World's Leading Fragrance Artists

The Givaudan Perfumery School nurtures and inspires tomorrow's leading fragrance artisans with generations of knowledge, passion and expertise. Open since 1947, Givaudan is the first fragrance company in the world to have its own school, which is widely considered the crème de la crème of fragrance training for those in the fragrance industry. The Givaudan Perfumery School is located in a brand new facility near the Givaudan European Creative Center in Argenteuil, France on the picturesque banks of the Seine, where Monet painted some of his early pieces. The school, under the direction of Jean Guichard, has established a new standard of perfumery training–a structured technique that enables perfumers to systematically learn the entire spectrum of the olfactive genealogy and develop an olfactive memory of over 1200 ingredients.

Developing World Class Talent

Without advertising or active recruitment, Givaudan receives over 200 applications for their Perfumery School each year. Givaudan does not accept tuition for training; acceptance is by invitation only. On the average, Givaudan selects only five new students every eighteen months, who dedicate at a minimum three years of study to become a Junior Perfumer. When study is complete, graduating perfumers have the opportunity to create fragrances for the most respected companies in the world. Today, it is estimated that thirty percent of the world's fragrances have been created by a perfumer who was trained at Givaudan's Perfumery School.

A constant source of top-notch talent, The Perfumery School is considered one of the cornerstones of Givaudan's success. With over seventy perfumers on staff, Givaudan represents the largest and most culturally diverse perfumery team in the industry, with the ability to develop fragrances for virtually every product category in every region of the world. Givaudan's New York Studio has also recently expanded the perfumery school to include a specialized program for key clients expressing and interest in exploring a deeper understanding of perfumery creation.

Givaudan is the essential source of sensory innovation for our customers driven by our mutual passion for excellence..

//ingredients.givaudan.com/givcom/v/index.jsp?vgnextoid=fdac57a2a396b010VgnVCM1000001053410aRCRD&vgnextfmt=default

Grasse s Museum - Partners

Switzerland

Givaudan

Imagine a group of people dedicating themselves to the Givaudan Perfumes credo: " doing everything to make the world smell better (TM)". Founded in 1820 in the French city of Grasse, -"florist to the world",and cradle of the perfume industry, Givaudan has been composing the most unforgettable perfumes the world has ever seen for over 180 years. In 1935 Givaudan was even the first company to collaborate with a major fashion designer to create Shocking by Elsa SchiaparelIi.

With a financial turnover of more than 2 billion Swiss francs, Givaudan is the undisputed world leader of companies creating and manufacturing perfumes, flavors, and raw materials. Its international headquarters are based in Vernier, Switzerland. The group is present in 46 countries covering all five continents. Givaudan employs an international team of 70 perfumers designing perfumes for both specialty markets and the general public.

Our perfumers are thus responsible for one third of the perfumes which currently exist throughout the world.

Givaudan's international organization includes a network of eight "Centres de Création" (located in Bangalore, Buenos Aires, Geneva, New York, Paris, San Paolo, Shanghai, and Singapore). Our international team of perfumers is thus qualified to create perfumes for a worldwide clientele. Givaudan seeks to establish real partnerships with its clients, so as to "create a sensory advantage (TM)" in the form of new perfume concepts, products, and brands destined for the world market.

Givaudan is the only company in our trade possessing its very own perfumery school which has trained numerous generations of talented perfumers.

Known as the leaders of world research, Givaudan's scientists study the genetics of olfaction, molecular modeling as applied to perfumes, sensorial physiology and psychology, as well as other leading disciplines, so as to better understand our perception of odors.

The Fragrance Foundation thus awarded Givaudan, the undisputed world leader of technology applied to perfume-making, the first Fifi for the most innovating technology of the year : in point of fact the ScentTrek (TM) can seek out and

www.museesdegrasse.com/partenaires/fla_ang/givaudan.shtml

capture unknown scents throughout the entire world. Referred to in a work entitled The Art and Science of Scent - Perfume, written by Cathy Newman of the National Geographic Society, this handy, ingenious, and innovative technology has received media coverage throughout the world.

Givaudan's perfumers were recently invited to contribute to a work on the history of perfume, The Scents of Time, commissioned by the New York Metropolitan Museum of Art. The book by now exists in an English, French, and German edition.

Its rich heritage, combined with state of the art technologies, has allowed Givaudan to "Créer un avantage sensoriel (TM)" : an added value to which all its clients are entitled.

The Manufacturer

Switzerland

Givaudan, Scents of Achievement

With 5,900 employees and operations in 40 countries, Givaudan is a world leader in the flavors and fragrances industry. One of its most modern fragrance facilities is in Mt. Olive, NJ: a 180,000-square-foot building complex that houses plant, offices, laboratories, production areas, shipping and receiving areas, and warehousing.

Givaudan was founded in 1820 in Grasse, France. In 1935, it became the first company to collaborate with a fashion designer, Elsa Schiaparelli, to create a designer fragrance, Shocking. Today, Givaudan has a global team of 70 perfumers specializing in the design of both fine fragrances and consumer products. It has six creative centers: Bangalore, New York, Paris, Sao Paolo, Shanghai, and Singapore. This enables its team of perfumers to create fragrances for customers anywhere in the world.

Givaudan is the only fragrance company that runs its own perfumery school, and many of the world's leading perfumers have been trained there. One out of every three fragrances used in the world today has been created by a Givaudan graduate. Givaudan's expert scientific team studies the genetics of olfaction, the molecular modeling of fragrances, and sensory psychology to explore the perception of smell, as well as a variety of other related state-of-the-art disciplines.

The company's fragrance division is organized into three global business units: fine fragrances, consumer products, and fragrance ingredients. Fine fragrances creates unique perfumery compositions for major brands of men's and women's fine perfumes, mass-market colognes, specialty retail, line extensions such as ancillary products for body bath and home. Consumer products include fabric and personal wash, hair and skin care as well as household and air care. The fragrance ingredients division manufactures ingredients for Givaudan's internal use and for other fragrance suppliers and customers who have their own creative perfumery resources.

The company has ten technology development centers in regional locations throughout the world, and two centers for strategic research in Cincinnati and in Zurich, Switzerland. The company invests over 8 percent of its global sales income in R&D to create unique flavor and fragrance systems for its

www.themanufacturer.com/us/detail.html?contents_id=3781

customers. Resources are focused on analytical chemistry, new molecule synthesis, delivery technology, and sensory perception. Givaudan has patented new molecules and delivery systems that significantly increase the performance of its products, and has developed a group of proprietary sensory measurement devices including the Cascade Olfactometer and the Virtual Aroma Synthesizer. These cutting-edge tools allow Givaudan to approach the creation of fragrance and flavor compounds with increasing objectivity and sophistication.

Discovery of new high impact molecules that stimulate the senses is a primary area of research. This enables R&D to respond to the need for improved performance in flavor and fragrance systems. Knowledge gained from the "Treks" together with structure/activity relationships provide the basis for new molecule generation.

Sensory science is based on a thorough knowledge of sensory physiology combined with perception psychology and requires measuring and interpreting human responses to product properties as perceived by the senses of sight, smell, taste, touch, and hearing. Reliable sensory evaluation of products has become paramount to their successful market introduction.

Increased emphasis on biotechnology gives Givaudan's scientists the flexibility to design novel flavor and fragrance molecules with improved properties such as increased intensity, enhanced stability, and biodegradability. Being able to measure sensory properties and convert this information into a universally understood language has become more crucial in the flavor and fragrance industry. Givaudan has the methodology, scientific framework, resources and infrastructure to support and fulfill its customer's sensory needs around the world.

Givaudan also has a flavor division, which creates flavors for use in a range of products, from soft drinks to pet food. It operates in the markets of both developed and developing countries. It is split into specific business units, addressing the individual requirements of different customers. These units include beverages, sweet goods, dairy, and savory.

Swiss Info

Switzerland

Givaudan Perfumer Has Nose for Success

Ursula Wandel – a perfumer at the Swiss company Givaudan – says that making a successful perfume is an art which relies on more than just a "good nose."

The expert is constantly on the track of a fragrance to become the new best seller in the highly competitive global perfume market.

Wandel is a senior perfumer at the Geneva-based Givaudan, the world's largest producer of flavours and fragrances.

Speaking at a recent event at the company's facility at Kempthal near Zurich, she explained some of the secrets of her trade.

Considered one of the top in her profession, Wandel is the name behind five perfumes by Nina Cerutti and the perfumes created for supermodels Cindy Crawford and Naomi Campbell.

But perhaps her most successful fragrance to date is "Hugo Woman" by Hugo Boss.

It's all in the sniff (Givaudan)

Benchmark

Introduced in 1997, it has been described as "a fruity floriental with a freewheeling spirited personality" but Wandel is much more down-to-earth about the properties that have made it a benchmark in its class.

"This was at a time when we made aquatic or watery perfumes... This was a new direction and it was a little bit wet, a little bit melony and a little bit sweet, juicy," Wandel told swissinfo.

And before other perfumers could jump on the bandwagon, Wandel came up with another winner for Hugo Boss, "Boss Intense".

"I think there's a real success when the coordination is perfect. The advertising must be coherent with the perfume and the bottle also plays a role".

"If all this goes together, you already have the basis for success," she explained.

Come and go

In today's world, perfumes come and go as fashion and trends change, although some have withstood the test of time.

Givaudan's creation "L'Air du Temps" for Nina Ricci is still going strong after being on the market for

www.swissinfo.org/eng/In_depth/detail/Givaudan_perfumer_has_nose_for_success.html?siteSect=107&sid=5570938&cKey=1109687143000

almost six decades. But most disappear from the shelves after the novelty has worn out.

"Today everybody wants success and it’s more and more difficult," said Wandel.

"Everybody wants a slice of the cake and so the perfumers take a good, best-selling perfume and they make little babies from them," she added.

"They are all a little bit similar and people become tired of them if they become too difficult to distinguish from each other."

Ursula Wandel’s greatest hit – "Hugo Woman" (escentual.co.uk)

Chance

Wandel said she came to her trade by chance. "I am very curious and put my nose everywhere."

"First I studied chemistry and then I was really interested in photography and the two things together brought me to the Givaudan perfumery school in Geneva."

The first year of her course was spent getting a nose for about 3,000 natural and synthetic raw materials, while the second was devoted to making imitations.

"It’s like painting. The painter first has to imitate the old master to see how it’s done. We did imitations of some of the big perfumes and then in the third year we did our own little creations, trying to develop our own style," she said.

Wandel later trained under a master perfumer and spent time in Asia before coming back to Europe.

Despite her olfactory prowess, she believes that anyone with a normal nose can train to become a perfumer, although it is a long process.

"It’s like jogging. If you run 20 kilometres every day, you are much better after a few months. We also are training every day and so you become better and better."

You have to be curious and you have to have a lot of patience.

Patience

"The thing is you have to be curious and you have to have a lot of patience. This is really important," explained Wandel.

The birth of a perfume can be easy or complex and it can take a year or even up to four years. There is also no patent on the recipes for perfumes.

And talking of recipes, Wandel sees a connection between creating a perfume and putting together a good meal in the kitchen.

"You need a base like a sauce, a fond, then you put the body on it and then you put a top on it or a roof," she said.

The perfumer knows instinctively when the scent is leading her towards a perfume that will attract buyers.

"That s it!"

"I think there’s a moment when you have done a lot of trials, maybe 300 to 400, when you smell and you say: That’s it! There is a harmony somewhere. It’s emotion. You feel something," Wandel told swissinfo.

Wandel admits that she works late in the evening preparing her samples for the following day, but she says it does have its rewards.

"The best part of my job is to come every morning into my office and smell all my trials and all my creations that I did the evening before. That’s really a pleasure for me."

swissinfo, Robert Brookes in Kempthal

Time CNN

Scents

The World of Smell

At the New York City headquarters of International Flavors and Fragrances (IFF), master perfumers experiment with novel smell combinations in the largest fine fragrance perfumery lab in the world.

The Smell Factory

IFF invests heavily in research, spending about $185 million annually to develop new smells for products like deodorants, shampoos and perfumes, and to create fresh flavors for snacks, packaged meals and drinks. To develop a new scent, perfumers combine dozens of oils, each with a distinct smell characteristic, to create a blend that they hope will exceed the sum of its parts. IFF has 5,300 employees and produces more than 31,000 compounds, about 60% of which are flavors and 40% fragrances.

Back to the Source

This Passion flower is one of more than 2,000 flowers, fruits, vegetables and herbs at IFF's New Jersey botanical gardens. Host to the world's largest collection of aromatic orchids, with 750, the facility serves IFF's perfumers as well as representatives of client companies, such as Estée Lauder, who visit for inspiration. The botanical gardens are remarkable in their diversity: an exotic fruit from China sits next to a colorful African flower, which resides near a spicy herb from India. When IFF researchers travel abroad and discover plants with interesting scents, they are added to the collection. The Passion flower pictured here, whose scent has fruity and honeysuckle notes, is used for both flavors and fragrances.

The Smell Camera

To capture the fragrance of a flower without having to kill it, IFF uses a kind of "smell camera" that detects and absorbs the particles that surround a plant to record its scent. The information is then translated into a formula with the help of chromatography and spectrometry, techniques that help identify the many components that make up a flower's scent. Using the formula, scientists can recreate the smell. Before such smell cameras were available, it was more common to have to take cuttings from flowers, which scientists say can change the way they smell. The method shown here is designed to capture how a living flower actually smells to the human nose. This purple flower is a Dendrobium Southeast, a hybrid of a hybrid that comes from Australia and New

www.time.com/time/specials/2007/perfume/article/0,28804,1618617_1618614_1618557,00.html

Guinea.

The Robotic Mixers

IFF's robotic mixers blend ingredients for samples that are sent to clients. Technicians still mix oils by hand when creating a new scent or flavor, but it is more efficient to use automated mixing when assembling batches of samples for outside clients. As part of its research program, IFF has been developing a database of smells and the reactions they draw from consumers. Each scent component is tested individually, separately from finished fragrances. Thousands of consumers in more than 30 countries have participated in studies in which they are asked to associate a particular smell with textures, feelings, and product-types. Although reactions vary, IFF's database helps its scientists identify certain psychological reactions a particular combination of scent components may evoke.

The Smell Library

IFF's vast library of scent oils serves as its perfumers' palette. Dozens of these can be combined to produce a new, branded smell for a shampoo, soap, body lotion, perfume or deodorant. Ever wonder where that apple smell in your shampoo came from? It may have been born in one of these pink bottles. Roasted pumpkin, blueberry jam, sake, banana peel, apricot, Andean pansy orchid and marshmallow are examples of the smells in the batch of oils pictured here. Beyond these common aromas, IFF has been scouting out new sources of smells for products still in development. Among the ingredients with particular promise: fennel, cucumber, melon, tomato leaf, black plum and hydroponic celery. And for products to be marketed globally: Japanese ginger, Indian mango, evening maiden orchids and pickled jalapeno peppers.

Nose Training

It takes more than a decade of intensive training and apprenticeship to develop enough skill to work as a perfumer for a leading fragrance developer such as Givaudan or IFF. In this picture Bella Glazman, an IFF fragrance stability technician, smells a mix of ingredients from a blotter. To master her craft, Glazman, like many others who work for top flavor and fragrance companies, has to keep her nose in top shape with periodic training. In addition to training its staff of scent evaluators, IFF runs a perfumery school for future talent. Students study at IFF headquarters in Manhattan as well as at the company's facilities in Grasse, France. After formal studies, they being apprenticeships.

The Art & Science of Scent

Although fragrance technicians use computers to coordinate the production of new scents, perfumery remains as much an art as a science. Jean-Pierre Subrenat, chairman of the World Perfumery Congress, says industrialization presents challenges for the integrity of that art. Now that scent has become a subject of broad interest to the public, Subrenat says that some novices without true training are claiming to be perfumers. And some of the resources perfumers draw on are being threatened. When Subrenat was growing up in the Grasse region of France, he says he was surrounded by the smell of jasmine when he drove around on his motorcycle. Now the fields he remembers enjoying are being supplanted by buildings. "People realize," he says, "that real estate is more important than perfumery."

Living With Smell

Once a scent has been blended in the lab, it's time for real-world testing. Before trying out a scent on consumers, IFF employees often take the smell home to their families and friends or wear it around the office. Here, Senior Perfumer Jean-Marc Chaillan and Senior Fragrance Development Manager Anahita Mekanik are getting a whiff of a new scent worn by colleague Liz Gomez. When IFF was helping to develop Clinique's Happy in 1996, Nicolas Mirzayantz, now head of IFF's fragrance development, gave it to his wife to wear so they could smell it together in a real-world environment. In addition to casual testing, IFF conducts formal psychological studies of its scents, asking consumers in more than 30 countries to

respond to detailed questions such as how a fragrance makes them feel, what type of product they might expect to find it in and what texture of material it evokes.

The Future of Fragrance & Flavor

Looking ahead, IFF, Givaudan and other leading fragrance and flavor suppliers are hoping to move beyond taste and smell to alter how products feel. One IFF technology, CoolTek, helps Mylanta to feel cool when swallowed and makes a Liz Clairborne summer fragrance, Curve Chill, feel cold on your skin. An Indian apparel brand, Urban Yoga, employs another IFF technology to embed lotions into clothing so it can deliver aloe vera to your skin and the smell of lavender to your nose. And beyond feel, IFF is focusing more and more of its research on health and wellness. Partners include manufacturers who want packaged food products to taste salty, for instance, without actually being high in sodium, or sweet without containing as much sugar.

Member Profile

The Sweet Smell of

Givaudan Success

EB gets invited to a sensory treat where fragrances and flavours bring to life the most ordinary of products on the shelf. Smelling and tasting his way with no complaints, the editor, puts his senses to the test with member company, Givaudan.

Sniffing a good story out is something that keeps me on my toes but my recent visit to Givaudan,brought new meaning to my nose-Ied efforts. At Giivaudan, sniffing around was a task made easy as I was introduced to the mystical world of flavours and fragrances. I was to realise for myself how a little drop of Giivaudan magic could create an assortment of spiritual charms inducing leasure and contentment in the consumer market.

This was to be a morning where my sense of smell was in for a treat, espeecially after clogging my lungs with the exhaust fumes of the corporate world each morning.

Givaudan is a Swiss-based company with over 300 staff neatly tucked in the outskirts of Woodlands specialising in an industry relatively new to Singapore - fragrances and flavours. But with roots going back as far as 1796, Giivaudan's presence in the global market has been far from hushed.

With its HQ in Vernier, Switzerland, Givaudan 's intention to establish Singapore as its base for the developmment of flavours and fragrances for the Asia-Pacific region went operational in 1995 after closing down its regional office in Hong Kong. Since then, the regional office has expanded rapidly with regional sales increasing at an annual double digit growth over the last seven years.

Though the company is renowned for its involvement in what appeaIed as a countless list of products, my tour around the premises brought with it flashes of Willie Wonka and the Chocolate Facctory. On first impression, I felt like I was the little boy in the book, awaiting to learn the secrets behind the factory and it became more of a fairytale to explore.

Givaudan’s indulgence in chocolate flavouring. The fact that the relished taste of chocolate's could be linked back to Givaudan was re'markable. I was indeed Willie Wonka, for that morning at least. I met Mr. Peter Werry Senior Flavourist at Giivaudan who gave me a preview of how flavours were created to meet the needs of clients, enabling their products to be distinguished, Peter was to me a magician, a scientist and an artist. To add creativeness to a product in the area of flavour requires attributes of all three characters and Peter had them all. His swift, calculated actions in producing an instant

strawberry flavour were a delight to watch, experience and taste on the spot.

I was impressed with his nose for details and eye for perfection in creating the 'perfect flavour'. I must admit in the bid for fair reporting that his offering of a chocolate that was flavoured and "artistically enginered" to melt in my mouth did silence my normal-barrage of hypocritical questions. There was no need for questions as I busily nibbled on the chocolate and coolly asked Peter for another. It was heaven if heaven could be made in a lab. Such is a life of a flavourist to create portions of passion and to the client that would mean repeated purchases from customers.

I was given a comprehensive tour of the company which displayed an array of modern facilities and technology ensuring rhe highest level of quality. It was impressive to see how the different ingredients were transported into huge containers via pipes built on different levels and "matured" before final packaging.

The Compositions that were transported to clients would then be added to their products creating the desire flavour or fragrance,which was then sold to the end consumer. These products are classified under fragrances or flavours which can range from detergents, perfumes, colognes, ancillary products for body bath and home, fabric and personal wash, skin care, alcoholic drinks, fruit juices, soft drinks, ice cream, yoghurts, snacks, meat, sauces, cereals, chocolate and the list goes on.

Mr Stefan Giezendanner, the Chief Administration Officer and Finance Director took time off his busy schedule to explain to me the company's operation and dealings. It became evident that I was extremely new to the industry as I gave a look of surprise when it was mentioned that there were over, 500 players in tile industry though there were basically nine big competitors with Givaudan amongst the top.

Singapore's strategic location has aided in the major investments currently seen in Shanghai, India, Australia and, Japan. The 1000 over employees in the region and 324 employees of 18 nationalities in Singapore give evidence to the organisation's fast expansion and commitment in sharing their expertise in this region.

The company has a notable 16 per cent a pproximately, share of the world market for fragrances and flavours. It has operation in 40 countries and representation in 69 others, with creative centres here and in China, among other places.

I met Mr. Theo Voogt, Senior Perfumer/Regional Director and Mr. Bart Rademaker, Business Unit Director (Beverages). Two individuals holding jobs that were different to say the least. Bart was in the flavours department and Theo was in fragrances.

I was introduced to the world of flavours by Bart where the science of flavour creation was fully endorsed in the areas of beverages, dairy, savoury and sweet goods. It was interesting how familiar products such as alcoholic drinks, ice cream, meats and cereals could be engineered to bring about the flavour that keeps us asking for more.

Givaudan has a team of 90 fIavourists who develop new products in close collaboration with the customer. Typically this is done at several "creation centres" located in the United States, Mexico, Brazil, India, Singapore, Japan, Australia, China, the United Kingdom, Holland and Switzerland. At these centres, flavourists develop the required compounds, often supported by the sensory evaluation and working with application experts who conduct flavour performance tests in finished products. Their process of helping customers build their brands combines the expertise of those familiar with the local market as well as scientists who understand the customer's product environment.

Over at the fragrance department with Theo, I was told that the fragrance division was organised into three global business units: fine fragrances, consumer products and fragrance ingredients. A look around the fragrance department

would raise a few eyebrows, as Givaudan's presence in several major perfume brands is obvious. Theo showed me a periodic element table like setting where numerous solutions were neatly tagged awaiting to be combined with another for that perfect odour. It was a job for a skilled perfectionist.

Their efforts to serve their client well, taking no credit for the success of any particular creation in the public eye is a policy they adhere to strictly. That of course leaves you guessing about their creations, which I must say could well be the perfume you have on now. Such is their presence.

Givaudan is the only fragrance company with its own perfumery school where many of the world's leading perfumers have been trained. Perfumers from their school have created one out of eyery three fragrances that exist in the world today. Also known as leading researchers, Givaudan's expert scientific team studies the genetics of olfaction, the molecular modelling of fragrances, and sensory psychology to explore the perception of smell, as well as a variety of otller related state-of- the-art disciplines.

It is amazing to learn about the development of the sensory industry in Singapore where the taste and smell of the senses rule. The rapid growth of this industry in Singapore is encouraging as Givaduan is currently expanding its office here. Tllis win bring with it new facilities and technology for R&D purposes. Having tasted success, Givaudan is just wanting more.

Smell is a potent wizard that transports you across thousands of miles and all the years you have lived.

Helen Keller

New Yorker

The Scent of the Nile

Jean-Claude Ellena Creates a New Perfume

On a sunny afternoon last June, the French perfumer Jean-Claude Ellena arrived at the offices of Hermès, the luxury-goods maker, in Pantin, just north of Paris, to present his first essais—or olfactory sketches—for the company's next perfume. Ellena, who is fifty-seven years old, had recently been named Hermès's first in-house perfumer by Jean-Louis Dumas Hermès, the chairman of the company. Dumas Hermès wanted to fix a delicate problem: Hermès had an elegant perfume collection that included classic scents like Calèche and 24, Faubourg, yet they sold only modestly. Chanel, one of Hermès's chief rivals, made ten times as much money on perfume. (Led by its eighty-three-year-old warhorse, Chanel No. 5, the company's 2003 sales totalled $1.2 billion.) It might be possible for Hermès to make one of its older scents chic through advertising, but the family had chosen a more daring strategy: it would adopt Chanel's approach, and set up its own perfume laboratory. Ellena's mandate was to invent an intimately related family of scents that embodied the aesthetic of Hermès—a distinctly Parisian firm, founded as a saddlery concern on the Rue Bassedu-Rempart in 1837, that is known for its craftsmanship.

The scents sold by fashion houses such as Donna Karan and Christian Dior are not made by Donna Karan and Christian Dior. They are created by independent companies, such as Givaudan, in Switzerland, and Quest International, in the Netherlands. Estée Lauder has long been celebrated for her perfumes, but she did not create them—they were created by professional perfumers. (White Linen, for example, was created by Sophia Grosjman, a senior perfumer at International Flavors & Fragrances, a company based in New York.) Lauder was a discerning and involved client, but saying that she created her own scents is like saying that Pope Julius II painted the Sistine Chapel.

Hermès knew that Chanel's in-house approach had its disadvantages. The house's fragrance collection was limited by the creativity of one man—Jacques Polge, the company's perfumer. Chanel couldn't tap a brilliant new perfumer at, say, Firmenich, a Swiss company. Then again, a fashion house that outsources perfume creation may come up with individual top sellers, but it will find it difficult to amass a collection with a coherent identity. Chanel had a perfumer with a consistent aesthetic, institutional

www.newyorker.com/archive/2005/03/14/050314fa_fact

knowledge, a sense of tradition. The Hermès family had taken note when Polge, in 2001, created Coco Mademoiselle, another multimillion-dollar hit.

Soon after entering the Hermès offices, Ellena was directed to a room with a large conference table. Hélène Dubrule, the company's international-marketing director for perfume, greeted him. Dubrule, who is thirty-nine years old, has an almost English crispness, and wears tailored clothes. Ellena was wearing his uniform: sports coat, button-down oxford, no tie, khakis. "Ellena" means "the Greek," and he looks the part, although his family is thoroughly French. He is not tall, but he has the confidence of a man who is conscious of being handsome.

Forty-five minutes later, Véronique Gautier, the president of the perfume division, walked in, dressed entirely in Hermès. After ordering tea and coffee from her assistants, Gautier, an elegant woman in her forties with dark hair, chatted briefly with Ellena, careful not to refer to the small glass spray vials that she knew he was carrying in his pocket. The presentation of an essai is a vulnerable moment for a perfumer. Ellena's submissions have been greeted with kisses and exclamations of joy. At other times, executives have hurled his creations back at him with fury: "This is shit! Get out, Monsieur Ellena! We have nothing left to say to you!"

Finally, Gautier said, in French, "Good. So what do you have?"

Ellena grinned and reached into his sports-coat pocket. "Three," he said. He placed three spray vials, labelled AG3, AD2, and AD1, on the table. He picked up several touches—paper smell strips—sprayed them with scent, and handed them to Gautier and Dubrule.

The women held the touches under their noses, and breathed deeply. After a moment, Gautier broke the silence. "One of them I like," she declared. "One I don't like at all."

Most perfume houses are based in France, and, as a result, the French dominate the industry. It is an insular and secretive business that remains governed by the solemn idea of the "purity of art." This is spoken of with equal parts pride and cynicism. "French perfumers come from the Sixteenth Arrondissement, and they all have degrees in poetry and commerce from some chic school," one Parisian perfume executive told me. "They consider that what they create is great art, and that, because they are French, the world should come on bended knee and think itself lucky to be blessed with their creations. You talk to a French perfumer, and it's 'My perfumes are wonderful, they lost five million dollars, but who cares, they're objects of art that will live forever and conform to my immortal, pure aesthetic.' "

The market for perfume has been sluggish in recent years. Since 1999, the French market has grown anemically, America's has been flat, and Germany's has shrunk. At the same time, the amount of money spent on perfume advertising has increased: the launch of a new scent often costs tens of millions of dollars, sometimes even more. Every fashion house wants a blockbuster like J'adore, a scent created for Christian Dior by Calice Becker, a perfumer at Quest International; in 2000, the year after its launch, it topped a hundred and twenty million dollars in sales. Yet trying to create the next J'adore is an expensive gamble, for the number of failures greatly exceeds the number of hits. A French perfumer rattled off for me the names of several recent "disasters": Champs-Elysées, by Guerlain; C'est la Vie, by Christian Lacroix; Kingdom, by Alexander McQueen. Moreover, it isn't clear how much profit a success like J'adore actually yields, considering the high marketing and production costs. The perfume industry's accounting methods rival Hollywood's in ingenuity. "You can't always tell a flop,

and no one can find out exactly how much a perfume lost, because companies consolidate their figures, although everyone whispers guesses," the perfumer said. "The strategy is that you spend in the first year on ads what you expect to gross in that year." Often, the ratio between advertising and sales fails to balance out. "Chanel's Égoïste, I heard, is a flop, given the amount they spent on advertising," he said.

These days, the creation of a perfume typically begins with a brief: a conceptual description of an imagined new scent, provided to the perfumer by the fashion house. When developing J'adore, executives at Christian Dior told Becker to create something "sexy like a stiletto and as comfortable as a pair of Tod's." Some people blame the brief system for the industry's decline; because the marketers who write briefs now commission and approve scents, they have acquired substantial control over the perfume-creation process. The French executive told me, "Basically, it's 'We want something for women.' O.K., which women? 'Women! All women! It should make them feel more feminine, but strong, and competent, but not too much, and it should work well in Europe and the U.S. and especially in the Asian market, and it should be new but it should be classic, and young women should love it, but older women should love it, too.' If it's a French house, the brief will also say, 'And it should be a great and uncompromised work of art,' and if it's an American brief it will say, 'And it should smell like that Armani thing two years ago that did four million dollars in the first two months in Europe but also like the Givenchy that sold so well in China.' "

The briefs at Hermès are more reserved. Every year, Dumas Hermès comes up with a theme for the fashion house. In 2003, it was the Mediterranean Sea. A year before, Gautier had discussed the project with Ellena, who was then working for Symrise, a German company. He "won the brief"—industry parlance for securing a contract. Gautier and Ellena travelled to Tunisia and paid a visit to the summer home of Leïla Menchari, who designs the window displays in Hermès boutiques. He created a scent that was inspired by Menchari's garden—it suggests warm sunlight splashed with cool water. The perfume was named Un Jardin en Méditerranée, and it became the first scent in a new Hermès collection: the Jardins. For 2005, Dumas Hermès had chosen "river" as the house's theme. At first, Gautier had considered requesting a scent that conjured a garden in the Amazon Basin. She then shifted her imagination to the Ganges. Finally, after consulting Dumas Hermès, Gautier chose the Nile, and a title: Un Jardin sur le Nil. That was the entire brief.

In early May, Gautier, Dubrule, and Ellena flew from France to Egypt. "When I am in the process of creating a perfume, I never know how things will start," Ellena said. "So when they say to me, 'You're coming with us up the Nile,' I find that agonizing. Because, right there, they're delimiting my space. I experience it as a loss."

Gautier, who evinces certainty when picking up a fork, had complete faith in Ellena. She had called him and said, "The first worked well. You'll do the same for the second." Nothing, he replied, is guaranteed.

Before the trip, Ellena had engineered a perfume in his head. Egypt inspired inevitable associations: heavy smells, such as incense, thick jasmine, and wood smoke. Yet, he wondered, what does a real Egyptian garden smell like? Dubrule had learned of a large garden in Aswan, called Kitchener, and she decided that they would make a visit during the trip.

Upon arriving in Aswan, the Hermès group checked into the Old Cataract Hotel, whose slightly shabby rooms featured elegant wood porches. Sitting outside, Ellena sniffed the air of the Sahara and found it disconcertingly blank;

he was so nervous that he couldn't sleep that night.

In the morning, they went to Kitchener, where there were few flowers in bloom. Gautier, Dubrule, and Ellena were disappointed, but they nevertheless started smelling. They sniffed nasturtium, a salad green with an anodyne watercress scent. Ellena ate some. They tried lantana, a perennial whose flowers smell, rather limply, of banana and passion fruit. They avoided looking at one another. Ellena smelled the flowers of the acacia tree, which have a soft, frangipani-like scent. He turned to Gautier and said, "That's not our story." She smelled it and agreed, dismissing it in her forceful manner. As Ellena walked through Kitchener, the perfume he had built in his head disintegrated and blew away; now he had nothing.

The group walked around Aswan. The markets were full of spices, and Ellena smelled lotus roots; when macerated in water, the root produces a smell halfway between peony and hyacinth. He also found some jasmin sambac, which is full of indoles, molecules that smell overwhelmingly animalic. Feces are rich with indoles, he explained to Gautier and Dubrule, and so are decomposing bodies. It's feminine, the smell of death. Calvin Klein's Eternity is a heavily indolic perfume—the name must have been ironic, he joked. But indoles were not their story, either.

He wrote his observations down in a small orange notebook. Ellena later told me, "The painter learns to see, the pianist learns to listen, I learned to smell. But it's a question of the brain, not of the nose, and you learn it simply by experience. Everyone can smell everything I can smell, but they don't know how to understand it, distinguish elements, or how to speak about it. That's why I'm a perfumer." He added, "I would say it took ten years to know, twenty to master."

One morning, Ellena and his companions went for a trip on the Nile in an aged wooden motorboat; ancient ruins on the surrounding rock cliffs loomed over them as Ellena steered the party upstream. The Nile has an opalescent black hue that, in shallow depths, becomes transparent. It has a fresh smell. They motored past wild reeds and feluccas—narrow boats with tall triangular sails—until they reached a small island. Walking ashore, they began following a street that led to a Nubian village. It was during this stroll that Ellena saw, hanging low in the trees that lined the street, plump green mangoes.

The fruit has a complex, authentically exotic smell: it is rich and fresh simultaneously, a rare combination. The scent is also ephemeral. The fruit exudes an odor only when it is on the tree. Once you pick it, the smell deteriorates; within sixty seconds, it is essentially gone. Ellena was beguiled by this elusive fragrance. Green mango, he suggested to his companions, could form the base of Nil.

Dubrule pressed her nose into the branches, finding a hint of apricot and grapefruit. At one point, Gautier frowned; she detected the smell of nail-polish remover. Indeed, green mango contains acetone, the solvent's active ingredient.

"You will, above all, not put nail-polish remover in the perfume!" Dubrule later commanded Ellena.

"Above all!" Gautier concurred.

Ellena promised the women that he wouldn't, knowing full well that he would. Acetone is often used in perfumery, he told me; it provides a lightning-like jolt. He would fold in some acetone, he explained, "but in such a manner that you won't feel it." Ellena said that he wasn't worried about ignoring his clients' demands. "There's always a décodage between what they say and what I am actually constructing," he said.

In the conference room, Gautier slapped the touche marked AG3 onto the table. “I reject AG3—very clearly,” she said.

Ellena was unruffled. All three concoctions, he said, had been inspired by the Aswan mangoes. “AD2 is more lotusy, whereas AD1 is more woody,” he explained. And the rejected AG3? Ellena smiled. “AG3 has magnolia,” he said.

Gautier’s brow furrowed. “Ah, that doesn’t surprise me,” she said.

Gautier kept picking up AG3 and saying, “No!,” then throwing it down once more. Ellena said of AG3, “I put in a lot of incense.” He added with a grin, “And there’s something in all of them you’ll never guess.” The women narrowed their eyes. “Something we talked about in Aswan,” Ellena hinted.

“Papyrus?” Dubrule asked.

“Non,” Ellena said, dismissively.

After some silence, Dubrule said, “La carotte?”

“Oui!”

When Dubrule had held a green mango outside the Nubian village, she had detected a carroty tinge. “A fruit that smells of a vegetable!” she had exclaimed. Yes, Ellena had replied, you’re smelling molecules that are common to both.

Gautier was pleased that Ellena had remembered to include this element in the perfume. “Jean-Claude’s specialty is atypical things,” she explained to Dubrule, recalling that Ellena had once put essence of tomato leaf in a perfume. She stood up sharply. “Now, on the skin,” she said.

Ellena rolled up his sleeves. Dubrule sprayed his forearms with puffs of his three viscous assemblages; they settled onto his skin in small slicks.

“They smell completely different,” Dubrule said, hovering over Ellena’s outstretched arms.

“Completely,” Ellena said.

“Much less mango,” Dubrule said.

The women smelled the three fragrances several more times, glancing at each other. “It’s strange,” Dubrule said grimly. “Almost the reverse of the touche.” This phenomenon, in fact, causes significant difficulty for perfumers. The great Guerlain perfumes—Aimé Guerlain created the first, Jicky, in 1889—were all tested exclusively on human skin, never on paper. They were expressly built to blossom and fade, over time, on the body. Today’s customers, however, don’t want five fragrances on their body at the same time; they prefer to sample perfumes on paper strips. As a result, most perfumes today are constructed to smell good, for a few seconds, on a paper strip—which is a perversion, unless you happen to be made of paper. Indeed, many of today’s perfumes don’t last (Kenneth Cole’s Black vanishes as quickly as a picked green mango), and they often clash with the body’s natural smells.

Gautier’s nose moved once more over Ellena’s warm skin. “I prefer AD2 on skin,” she said.

“It’s AD2,” Ellena agreed, lightly.

Dubrule was definitive. “It’s AD2,” she said. After a pause, she added, “I’m finding a lot of rose in it. It’s not bad—it will just need adjusting.”

“It’s the lotus,” Ellena said. “I’ll fine-tune that.”

“This works perfectly for Hermès,” Gautier concluded. She did have one concern: would men be able to wear it? Both she and Ellena wanted Hermès to dispense with the archaic division between masculine and feminine scents—a mere marketing device designed to make heterosexual men comfort-

able with the idea of wearing fragrance. Though Gautier was, wisely, cautious of being too radical for the market, she nevertheless had decided that the Jardins collection would be unisex.

Dubrule reminded Ellena that Hermès was aiming to have settled on the formula of the "juice"—the industry term for a scent—by July 10th. (The European Union has a list of banned toxins and allergens and is constantly adding perfume ingredients to it.) Meanwhile, Gautier stared at the transparent essai. "Do we need to color it?" she asked.

Dubrule considered the question. "No," she said.

"Good," Gautier said. "We're pretty happy—non?" She didn't really mean it as a question, but it nevertheless sounded like one.

After the meeting, Ellena returned to his home, in Grasse, on the Côte d'Azur, and went to his former office at Symrise. (Hermès had not yet provided him with a lab, and Symrise had agreed to let him rent his old space.) He soon received a call from Gautier. "AD2 sent bon," she said—it smelled good. Yet, she continued, changes were required. She and Dubrule liked the scent's spiky freshness, but Dubrule thought that it was a bit harsh—too much like grapefruit. Both women thought that la persistance, the amount of time the fragrance lasts on skin, needed to be lengthened. And they wanted the smell of green mango to be more present on the skin. Good luck, Gautier said. Ellena was encouraged. "I have no anguish once I've got to the 'Ça sent bon,' " he told me.

At Symrise, Ellena had access to more than a thousand ingredients—some natural, some synthetic. He used only a fraction of them. Ellena is a minimalist in materials and a maximalist in thought. Over the years, he has refined a sort of Bauhaus School approach to perfumery: clean scents made from deceptively simple chemical formulas.

Ellena's best-known fragrances are Eau Parfumée au Thé Vert, for Bulgari, and First, for Van Cleef & Arpels. Just before joining Hermès, he had created L'Eau d'Hiver for Frédéric Malle's élite collection, Éditions de Parfums. The scent was inspired by an aspect of the great 1906 Guerlain perfume Après l'Ondée. He said, "The problem—well, you can't say there's a problem with Après l'Ondée—but, bon, voilà, it is too opulent. Guerlain is baroque: put this in, and this, and this." On the other hand, he said admiringly, the Guerlain scent had a marvellous sillage—the olfactory wake that trails behind a wearer of perfume. Someone once defined sillage to me, rather metaphysically, as the sense of a person being present in the room after she has left. Creating a sillage that is potent but not overpowering is tricky. With L'Eau d'Hiver, Ellena said, he wanted to pay homage to the Guerlain scent's sillage—"but in enlightened form." He selected elements from Après l'Ondée that were "soft, comfortable, light." One of these was the natural essence of hay. He took some aubépine, an olfactory blend of finger paint and the wax used to clean linoleum floors, and added it to methyl ionone, a synthetic whose smell suggests iris. He then added a few more ingredients, including a natural distillation of honey. It took him two years to perfect his formula, which in the end contained twenty ingredients—very few, for a perfume. L'Eau d'Hiver smells, delightfully, of ground white pepper and cold seawater, with a touch of fresh crab. And it has a sillage worthy of Guerlain.

A master perfumer like Ellena has memorized hundreds, if not thousands, of recipes for manufacturing smells. Many complex natural scents can be conjured with only a few ingredients. The scent of freesia, he explained, is created by combining two simple molecules: beta-ionone and linalool, both synthetics. (To give freesia a cold, metallic edge, a touch of allyl amyl

glycolate is added.) The smell of orange blossom is made by combining linalool and methyl anthranilate, which smells like Concord grapes.

In my presence, Ellena once dipped a touche into a molecule called isobutyl phenal acetate, which has a purely chemical smell, and another touche into vanillin, a synthetic version of vanilla. He placed the two paper strips together, waved them, and chocolate appeared in the air. "My métier is to find shortcuts to express as strongly as possible a smell," he explained. "For chocolate, nature uses eight hundred molecules. I use two." He handed me four touches—vanillin plus the natural essences of cinnamon, orange, and lime. The combined smell was a precise simulation of Coca-Cola. "With me, one plus one equals three," Ellena said. "When I add two things, you get much more than two things."

Even though Ellena's perfumes often evoke the smells of nature, he believes that scents containing only natural materials are not, fundamentally, perfumes. The art of perfumery, Ellena believes, is the art of gracefully combining different chemicals, some natural, some synthetic. The first perfume synthetics were created in the nineteenth century. Aldehydes, which were synthesized in the eighteen-eighties, are the key to Chanel No. 5, giving the scent its powdery, soapy, luxurious signature. Synthetics such as ambroxan, which boosts wood and amber notes in perfumes, and karanal, which adds a strong woody accent, are regularly used in fragrances.

Ellena is proud to be an illusionist. "Picasso said, 'Art is a lie that tells the truth,' " he told me. "That's perfume for me. I lie. I create an illusion that is actually stronger than reality. Sketch a tree: it's completely false, yet everyone understands it." The point of Un Jardin sur le Nil, he said, was not to reproduce the scent of a green mango but, rather, to create a fantasy version of green mango.

On the flight back from Aswan, Ellena had jotted down a formula of thirteen ingredients, which had become his rough sketch for AD2. A natural essence of bitter orange, he had decided, would simulate the freshness of the green mango. And a synthetic grapefruit would evoke mango's acidity. (Perfumers don't use natural grapefruit, because it contains many sulfur atoms, which disintegrate to form malodors; the synthetic also has better persistance.) He would also add rosin, the resin that musicians rub on violin bows. Of his original thirteen ingredients, he eventually eliminated two. Opopanax, a synthetic that he had expected to produce a resinous smell, ended up evoking mushrooms. Another chemical, lionone, was supposed to help convey the smell of mango, but it interacted with the other materials to create the illusion of apricot. He had replaced the lionone with carrot, and it had worked: AD2.

Now he began responding to Gautier's criticisms of AD2. He added several elements that, when combined, would heighten the scent of mango: hedione, a synthetic that simulates jasmine; methyl anthranilate, which is used prominently in Calvin Klein's Eternity; and neroli oil, which is derived from sour-orange flowers. Ellena documented the formula of his updated AD2: he gave the name and product code for each material; he detailed how many millilitres of each ingredient were used in making the juice; and he listed the price of each ingredient, per litre.

He then created three additional variants of the original AD2, which his lab assistant mixed and lined up on his desk in tiny vials: AJ1, AJ2, AJ3. He smelled them on the touches, and was dissatisfied. All were too citrusy. He lowered the grapefruit synthetic in all of them; to all except AJ3, he added varying amounts of hexanal trans 2, a synthetic that smells simultaneously of golden apple and glue paste. He smelled his iterations again. "At the moment, I like AJ3," he told me.

"It's the freshest."

On June 11th, Ellena drove to Laboratoires Monique Rémy, a small company in Grasse that is one of the most rarefied suppliers of natural perfume ingredients. L.M.R. supplies Chanel's perfume division with dozens of exclusive materials that no other house can obtain. For the wider perfume market, the company produces a distillation of tuberose—a flower that blooms on agave plants—that is one of the most beautiful scents ever created. If you need a basil, the company can supply you with a Basilic Essence, for thirty dollars per pound, or a Basilic Grand Vert Absolue, at five hundred dollars per pound. The company's most expensive ingredient, Iris Naturelle Absolue, costs twenty thousand dollars per pound.

"This is the first time I come here as Hermès," Ellena said, parking his Citroën outside the L.M.R. factory. He squinted at the building. "We'll see how they treat me." For years, the company has supplied Hermès with several of the ingredients for 24, Faubourg, including distillations of orange blossom, rose, and iris.

Frédérique Rémy, Monique's daughter and the firm's commercial director, is an attractive, direct young woman with dark hair. "Félicitations!" Rémy said, smiling. She has known Ellena for years; they are both natives of Grasse. They put on heavy protective glasses—corrosive solvents are used in the distilling of perfume essences—and chatted animatedly as she took him on a tour of the factory floor. (Rémy despises the glasses, which are required by French law; she kept taking them off, and at one point said, "Jean-Claude, can't you get Hermès Eyewear to do something in these?" Ellena said that he'd look into it.) The machines were huge. Some have blades to hash grains and roots; the essence of iris, for example, is obtained from the root, not from the flower. Other L.M.R. machines make essences: odorant molecules are distilled from a flower or a fruit rind with steam at two hundred and twelve degrees Fahrenheit. It takes ten tons of oranges to create a thousand pounds of bitter-orange essence, which Rémy typically imports from the Ivory Coast. Still other machines create absolutes: smells are obtained with volatile solvents at around eighty-six degrees. The two methods extract two somewhat different groups of molecules. A rose essence includes the material's top notes. A rose absolute gives you the base notes.

Ellena began his career among these machines as a teen-ager, extracting jasmine. His boss had a Ph.D. in chemistry and taught Ellena the science of scent. By taking just one sniff of a jasmine essence or absolute, he can tell you not only the flower's country of origin but what kind of machine distilled it—stainless steel, aluminum, or steel.

A few companies, such as Chanel and Malle, continue to demand costly materials—the juice for Chanel No. 19, which contains an absolute of iris, supposedly costs a thousand dollars per pound—but the quality and expense of the materials that other fashion houses are willing to use have been plunging in recent years. The average cost of a perfume formula has dropped considerably in the past decade or so. Fashion houses set the maximum price of a juice when submitting their briefs. According to perfume experts I spoke with, the standard price for ingredients used to be about a hundred dollars per pound, but clients now often require that the juice cost no more than fifty dollars per pound.

Hermès is committed to giving Ellena creative liberty, and he would be allowed to decide which supplier's materials would be used in the company's new perfumes. Ellena was considering adding narcissus to the base for Nil, and he had heard that L.M.R. had created a new version of narcissus, called absolue narcisse de distillation moléculaire. (The company tends

proprietary fields of narcissus in the center of France.) Rémy took him to the stockroom, a long and low-ceilinged room that was lined with refrigerators. She brought out the absolute of narcissus and set it before him. He leaned over and inhaled. She watched him carefully. It was a beautiful scent, with a raw green hint—and it was, he realized, wrong for Nil. It was not sufficiently tender. He got in his car, went back to his lab, and thought, That won't work. Now what am I going to do?

Throughout the summer, Ellena continued to experiment, accenting one ingredient, eliminating another. He was pensive but not worried. "For the moment, I'm floating," he said. "Maybe the answer is already in the perfume. Often, you just need to turn up something already in there."

At the same time that Ellena, Gautier, and Dubrule were trying to perfect the juice for Nil, they were attempting to answer a grander question: What is an Hermès perfume? If you are Stella McCartney, you do not worry about history and tradition and craftsmanship. You launch Stella, which is a pleasant, millimetre-deep fashion fragrance—it has no persistance, no sillage, and no reference to anything other than its marketing team's sense of the cultural pulse. But, at Hermès, Gautier had an entire collection, not a single fragrance, to worry about. The existing collection lacked a signature—an over-all stylistic coherence. Its scent Bel Ami was imbued with leather, which made sense, but what did the citrus notes of its perfume Eau d'Orange Verte have to do with Hermès? "Obviously, Hermès is leather," Yves de Chiris, an independent perfume consultant, told me. "But how do you make leather friendly to the twenty-first century? It's a problem. Maybe there should be a very subtle leather note in each perfume that says, 'I am Hermès,' that underlies but doesn't lead. That might lend coherence."

A signature is a difficult thing to create. Giorgio Armani perfumes have one of the industry's cleanest signatures—a matte smoothness, the olfactory equivalent of brushed platinum. Ellena had been thinking about the signature problem. Many perfumers believed that a signature did not have to be something as literal as adding a specific note to each new scent. Indeed, a signature could be more subtle—an expression of temperament. One perfumer described the Hermès brand to me as elegant and respectful. Good taste. Jean-Michel Duriez, the in-house perfumer for Jean Patou, described Hermès to me as "restraint, delicacy, refinement." Another Parisian perfume executive suggested that Hermès's 24, Faubourg, with its subdued floral scent, best represented the house's conservative ethic. "Verrouillé à tous les étages," she said of the scent—every floor locked tight. The perfumes in the Jardin collection, which were delicate rather than lurid, fit the house's aesthetic well, Ellena believed.

Another way to link Nil to other Hermès fragrances, Gautier and Dubrule had decided, was through bottle design. As with other perfumes in the Jardins collection, the bottle for Nil would be identical in shape to that of Calèche, one of Hermès's most popular perfumes: a slim sheath of glass, with a rectangular profile, gently rounded edges, and a thick, heavy bottom. To distinguish Nil, the bottle would be tinted green—a nod to the Aswan mangoes.

In 2003, Hermès, a quintessentially Right Bank company, had placed Jean-Paul Gaultier, the French designer known for his avant-garde sensibility, in charge of its women's collections. Choosing Gaultier was, in some ways, a savvy move for the staid company, but it was a risk. Hermès had been the fashion house preferred by Madame de Guermantes, whereas Gaultier was more the type to appeal to J. Lo. (Then again, in 2002 J. Lo had launched her own perfume, Glow, sales of which have exceeded eighty million dollars.)

Ellena was not interested in competing with J. Lo. Indeed, he was pointedly dismissive of commercial concerns. “I’m certain that AJ2 would be the most commercial,” he said when I visited him in mid-June. He then added quickly, “But I never take a position on the commercialness.” He smelled his essais again. “I’m pretty happy with the sillage in these. The problem is still the persistance.” He paused. “But I’ll find the answer.” He paused again. “I hope I’ll find the answer.”

Ellena interrogated his four essais again and again, and finally devised a single scent, AJ, that combined elements of all of them. When he presented AJ to Gautier and Dubrule, their response was tentative. The perfume was lovely, they said, and you could tell that it had been carefully constructed. Yet they were concerned that it might be too citrusy. More important, they weren’t sure that AJ was “perfumey” enough—which is typically shorthand for saying that it lacked aldehydes. Gautier and Dubrule told Ellena to keep AJ’s enlivening freshness but asked him to give it more body.

So Ellena created AS, which was more flowery and fruity, with a bit more ripe mango. Gautier didn’t really like it, finding it too easy. As she put it, it was too “sixteen-year-old girl.” Dubrule found it pleasing at first, then tried it on her skin and pronounced it too sweet, lacking a certain elegance. And so Ellena returned to his lab, balancing millilitres of molecules against millilitres of other molecules. He began creating A*.

For Ellena, A* marked a gentle turn toward the woods. Among the natural materials, he lowered the citrus and excised a third of the bitter orange, then welded on a few Monique Rémy materials, including an incense redolent of pine trees, which costs nearly a hundred dollars per pound, and an absolute of honey, which costs a thousand dollars per pound. When, in 1976, Ellena had created the perfume First—his first perfume—he had used a hundred and sixty ingredients. There were thirty in A*. He smelled it. It was green mango, the very instant before being picked, though it was not the fruit itself. It was an idea he had created of green mango, a dreamy abstraction. And its sillage suggested the unblemished peel of the freshest, greenest sweet fruit.

In August, he returned to Paris and presented A* to Gautier and Dubrule. It was almost a month after the initial deadline. The European press launch for Nil had been set for January, and the product—which would cost a hundred and twenty-five dollars for a hundred-millilitre bottle—needed to be in U.S. stores in February. For weeks, Ellena heard nothing. Finally, Gautier telephoned him. A* smelled fantastic, she said, and it had more body and lasted longer than previous iterations. “It’s always ‘Longer, longer, longer,’ ” Ellena said, chuckling. “She’s terrible about that.”

By late summer, Ellena was installed in his new lab. With Gautier’s blessing, he had chosen to set up his workspace in an opulent glass-walled house outside the medieval French town of Cabris. The modernist house, which resembles a James Bond hideaway, is in a pine forest. In the living room, where he placed his simple wooden desk, there is a view of the distant Mediterranean. The chairs are upholstered with ostrich skin.

“Today, as far as I’m concerned, Un Jardin sur le Nil is finished,” Ellena said, though he was still tweaking it, “just for the pleasure.”

In his new lab, which he placed in one of the bedrooms, he had installed around two hundred and twenty ingredients. He had never even used a hundred of them, he said. He shrugged. “They are there because . . . peut-être. One day. Like a word in a dictionary. You have it. I have a tiny dictionary. I use few words.” He continued, “I want to master what I’m doing. Mastering means that for each word, every material in the formu-

la, I know why it's there."

Ellena was now finishing work on a luxurious new collection of scents that would be called the Hermèssences. In Paris, Dubrule had told me that wearing an Hermèssence would be like dining with Pierre Gagnaire or Guy Savoy—"great French chefs who are going to search out unexpected contrasts. We will be able to use some very Hermès materials." By this, she meant expensive. Her culinary description was metaphorical, but, in fact, Ellena was creating a scent called Ambre Narguilé—a narguilé is a water pipe—which smells of sliced apples wrapped in leaves of blond tobacco and drizzled with caramel, cinnamon, banana, and rum. And on his desk was a vial that contained the beginning of the next Hermèssence. It smelled, he said, like a leather bathing suit emerging from a swimming pool. He was working on a scent that smelled like leather sprinkled with sugar. His goal at Hermès, he said, was "to show that the perfume is not the result of chance but a reflection of a reasoned process." He made a series of stepping motions with his hand, squinting at a target ahead. "When you start out, it's more about your passions. At the end, it's intellectual."

Fast Company

Smell of Success

Meet Givaudan Roure's Perfumers

A building in Teaneck, New Jersey is the source of some of the world's most popular fragrances. Meet Givaudan Roure's perfumers, the 'ghostwriters' behind your favorite scents.

A single 1.7-ounce bottle of Bijan's Michael Jordan cologne retails for $23. From October 1996, when the fragrance was launched, until Christmas of that year, Bijan sold 1.5 million units. In its first seven weeks, the cologne rang up $40 million in sales; by June 1997, sales had reached the $75 million mark, making Michael Jordan cologne 1996's best-selling new fragrance. The Fragrance Foundation awarded the cologne two FiFi Awards - the industry's version of the Oscars: Men's Fragrance Star of the Year and Men's National Advertising Campaign of the Year.

That's a Michael Jordan-like achievement for Bijan - and for the perfumers of Givaudan Roure, the flavor and fragrance arm of Roche Holdings Ltd., a $14 billion Swiss conglomerate. Givaudan Roure fashions new scents on behalf of the world's leading designer names and consumer products - fine fragrances, such as perfumes and colognes, as well as commercial fragrances for shampoos and deodorants. They're the ghostwriters behind Calvin Klein's Obsession, Christian Dior's Poison, Yves Saint Laurent's Opium, Cartier's So Pretty, Armani's Aqua di Gio, and Hugo Boss's Hugo. In fact, more than 30% of the world's fine perfumes for women can be traced to Givaudan Roure - and to an inconspicuous brick building set back from the street in suburban Teaneck, New Jersey.

Inside the building, designed by Der Scutt (architect of the Trump Tower) and constructed in 1972, is an environment that fosters creativity. "We're in an unusual industry, and we're a creative company," says Givaudan Roure CEO Geoffrey Webster. "We have artists whose input is critical to our winning new business. The design of the building is very important for creativity, communication, and interaction."

Over the years, Webster has worked with Scutt to update the building, to make it a more comfortable and inspiring work space. An immaculately raked Zen garden occupies a central courtyard. A spiral staircase connects the perfumers on the first floor with those on the second. The building's circular layout - flowing from the reception area, to the offices of the creative fragrance managers, to the perfumer's circle, to the laboratory - matches the circular, iterative process that Givaudan Roure uses to develop a fragrance.

Coming up with new fragrances

for clients is a highly competitive business. To increase its chances of savoring the sweet smell of success, Givaudan Roure has invested in three key facets of fragrance development: well-educated noses, a smart sniffing machine, and total sensory inspiration.

The Education of the Nose

Senior Perfumer James Bell, a 41-year company veteran, was trained at Givaudan Roure's perfume school in the town of Grasse in southern France - the oldest such school in the world. "It was a wonderful place to live and study," says Bell. "You had to learn to identify about 2,800 synthetic materials and about 140 natural materials. The only way I could do it was by association: One smell would make me think of a color, another would remind me of an experience, a third would represent a simple flavor, such as a raw peanut."

The Whiff of Technology

Ken Purzycki, givaudan roure's director of fragrance science, calls it "12 human noses with a memory chip": the ScentTrek machine. Employing state-of-the-art technology, the portable ScentTrek goes deep into nature to capture a scent. The machine's clear plastic globe surrounds a flower for 24 hours, and the device takes measurements every 2 hours, using 12 filters - without touching the plant.

With so many new fragrances coming onto the market, ScentTrek offers Givaudan Roure an important competitive weapon: a technology that can reproduce previously undetected smells. Givaudan Roure used ScentTrek to help create the compounds of scents - called "notes" - that define Michael Jordan cologne: "Fairway" came from using ScentTrek on Jordan's favorite golf course; "Home Run" captured the smell of a leather baseball glove; "Rare Air" was gathered by ScentTrek on a Costa Rican beach; "Cool" drew upon alpine scents, mountain air, and a hint of Jordan's native North Carolina; and "Sensual" was derived from clean, musky smells.

The Taste of Inspiration

Because taste and smell are so closely linked, Givaudan Roure employees participate in tasting sessions, where they sample unusual combinations of foods and spices prepared by Jeff Cousminer, the corporate chef. At one tasting, edible floral sorbets, such as rose, lavender, and geranium, were featured. Another time, a brewmaster introduced perfumers to the ingredients that go into beer, and the session ended with the creation of individual microbrews.

But for James Bell, the most powerful sources of inspiration are personal. A long-time saxophonist, he puts on recordings by his favorite jazz artists, listening for musical notes that he can replay as fragrance notes. "Inspiration is everywhere," Bell says, "if you're willing to recognize it and let it move you."

Lisa Chadderdon is a member of the Fast Company editorial staff.You can find Givaudan Roure on the Web at

http://www.roche.com/roche/division/dfrag.htm

Fast Company

You Smell Delicious

Perfumer Creates Entirely New Fragrance Category

With the world cuckoo for cocoa right now, chocolate fragrances were probably inevitable. "There's this sensation we get from chocolate," says Caroline Sabas. "It's also good for the skin, so why not wear it?" But creating an all-natural chocolate scent for Origins' proposed cocoa therapy line was easier said than done. She collaborated with Givaudan's flavor division in Ohio to combine an all-natural flavor that smelled like chocolate with nutmeg, patchouli, and citrus oils. In the process, Sabas opened up a new frontier of 100% natural flavor-based fragrances for Givaudan. The line, which debuted in November, has been met with early praise, and one whiff of the body scrub, which looks like whipped chocolate mousse, explains why: You may try to eat it. That, of course, isn't recommended.

2005 FAST 50 WINNER
Caroline Sabas, 30

Perfumer
Givaudan Fragrances
New York, New York

What did you accomplish in 2004?

As a Perfumer for Givaudan Fragrances - one of the world‘s leading fragrance houses, my most significant accomplishment of 2004 was the creation of Origins Cocoa Therapy collection‘s scent (which debuted in November 2004). This was a tremendous achievement in the fragrance world, as the cocoa component of the line is 100 percent natural, which has never yet been seen in a fragrance line. As such, this is the first line on the market to incorporate all natural ingredients to form a true cocoa scent.

How did you do it?

In creating Origins Cocoa Therapy, I was highly innovative in the creation of the fragrance and it's ingredients. As there was no cocoa fragrance note on the market, I utilized all natural raw materials to create one. In doing so, I also had to take careful steps to ensure that the end product would remain stable month after month - meaning that the scent wouldn’t change over time. This is a huge challenge when only natural extracts are used.

What were the major obstacles that you faced?

When creating the "usual" fine fragrance, I have a palette of about 2000 raw materials including synthetic and natural raw materials. With this particular scent, I was limited to only naturals also limit-

//www.fastcompany.com/fast50_05/winners/37.html

ing my creativity, one hindrance I had to overcome. Secondly, there were no natural chocolate extracts on the market that we could utilize to create a genuine chocolate fragrance. Therefore, I had to source and entirely utilize raw materials in order to create a rich chocolate scent. My goal was to produce a 100 percent natural chocolate accord. This was a highly challenging and an extremely technical task. In order to overcome this difficulty successfully, I worked in collaboration with Givaudan's Flavours division using an all-natural chocolate flavor to expand my palette – giving the scent its rich "gourmand" character.

What was the result?

The creation of this Origins Cocoa Therapy line has opened the door to expanded collaboration between our Givaudan Fragrances and Flavours divisions. This type of collaboration exemplifies what Givaudan calls "Sensory Fusion™" – a process unique to Givaudan and this is a great way to expand our resources and developments. As seen in Origins Cocoa Therapy, a Perfumer can capitalize on the trend of scents that possess an intense "gourmand" character by incorporating a flavor component.

What are your goals for 2005?

The industry is sometimes intimidated by fragrances that are very unique. As a result of our economy, people are not taking risks and are sticking with launching fragrances that are considered mainstream. I want to be creative and make amazing and unique scents. My biggest joy is to have people wear my fragrances, fragrances make people feel beautiful. My goal is to create fragrances that start new olfactive categories and trends, and which will become classics.

Corsica - Isula

Francois Coty

The Corsican Father of Modern Perfumiers

François Coty (1874-1934) was born in Ajaccio, near the Bonaparte family home (and allegedly he's a descendant). He is remembered in Ajaccio, by having the city's football stadium named after him!

He changed the more traditional spelling Coti to Coty (you can still find plenty of Cotis in the Corsican phone book) after his mother. Apparently, though, his real name was Spoturno.

He was recognised as one of the leading perfumiers between the two world wars and had the nickname 'the Napoleon of Perfume'. He was the first touse Lalique (I recently dug up one of his bottles in my vegetable patch!) and Baccarat for bottling his products.

He amassed an enormous fortune, installed many innovations in his châteaux, was a great philanthropist, but died alone and ruined in his château at Louvenciennes, near Paris.

Coty Made a Fortune in Business

The history of the man and his business are somewhat difficult to unravel, because he was such a secretive fellow, despite being a press baron at one point (owning among other titles, the Figaro).

Coty made his way to Paris at an early age and, noticing that all the fashion houses covered their floors with ostrich feathers, he proved himself as a salesman of these lavish floor ornaments.

However a pharmacist neighbour with whom he played 'piquet' told him one evening that he was unavailable, because he had to prepare his toilet water prescriptions;

Coty helped him and learned the method. His nose was good, both in the business and the olfactory senses. He saw the opportunity to make toilet water and present it in an artisitc package. He was to say, "Give a woman the best product you can prepare, present it in a perfect flask of a simple elegance but irreproachable taste and sell it at a reasonable price, and you will witness the birth of a big business traditional perfumery".

He was trained by the Grassois Antoine Chiris, learning about growing and harvesting flowers and the extraction of their scent. When he finished his training, he peddled his scents to the barbers of Paris.

//www.fastcompany.com/fast50_05/winners/37.html

In 1900 he married Yvonne Alexandrine Le Baron. He later upset traditional perfumery by composing perfumes which married natural essences with synthetic ones that came out of the Industrial Revolution. Born from this period are his la:

Rose Jacqueminot (1904),

l'Origan (1907),

Ambre Antique (1910),

Chypre 1917,

and with them, contemporary perfumery.

With a little money from his grandfather, François Coty set up his first business in the Rue de la Boetie in Paris. Within three years of his first opening, he was so successful that he moved his factory to the more fashionable Bois de Boulogne.

Working with Lalique to revolutionise the Perfume World

Coty revolutionised the sales of perfume by teaming up with René Lalique to present his product in beautiful bottles. “For his was the merchandising genius that perceived perfume as something in a lovely bottle, rather than as merely something lovely in a bottle.”

So the story goes, he nearly hit his first bankruptcy soon after he started when sales were lukewarm, but then in a Paris department store a bottle of his first perfume, La Rose Jacqueminot fell to the floor and smashed. A lucky break!

The resulting scent capitivated customers and the product sold 500 bottles within days due to the intoxicating and life-like smell of the rose perfume.

Coty had developed a range of synthetic-based fragrances and the technology to produce them in large quantities. He believed that his products should be as appealing "to the eye as much as the nose".

Previously, perfume had been sold in pharmaceutical bottles but in 1908, Coty commissioned René Lalique not only to design the bottles, but also labels for his new range of fragrances. At the time Lalique was the world’s undisputed master jeweler but he had never made glass vessels commercially.

Within a year of the first approach by Coty, Lalique had taken over a small glass works near Fontainbleau and began to produce perfume bottles, powder boxes and dressing table accessories.

Later, creating another fortune in the New World

Coty soon set up in New York (1904), with an associate B Levy, recognising the size of the potential market. Wanting to ensure faithfulness, more than half the US staff were sent over from France, like the essences. Buying initially from Grasse, he soon set up his own gardens in France and Italy, especially to produce orange blossom and jasmine, not least since even in 1930, jasmine oil fetched up to eight hundred dollars a pound in the US.

In 1921, Jean Despres was sent to the New York company, starting as a shipping clerk, but soon became a travelling salesman for perfumes and gift sets. Despres' career carried on long after Coty's death in 1934 and he became Executive Vice President in 1942, a position he held till 1968 when the company was taken over by Pfizer Inc.

He too was an innovator, creating in-store displays and trained in-store merchandising staff to start the process that has resulted in the cosmetics counters of today's department stores. Branches were soon opened all over the world. Exports went from France, except to the US, UK and Romanian subsidiaries who set up their own manufacturing, using essences from Paris.

Also Using Wealth as Fuel for Political Ambition & Failing.

Corsica has not much recognised Coty, but perhaps this is because there was a cloud over his election as a senator in 1923; irregularities were suggested and he lost the seat before ever having taken it. It was perhaps this that encouraged his controlling nature to take up journalism, through ownership. He went from strength to strength in business, and in 1922 he bought the newspaper, Le Figaro and installed very right-wing views, although he'd been a radical socialist earlier in his life.

At the worst of France's post-war financial crises, Coty offered the state a hundred million franc loan, albeit with conditions. His fortune amassed from his perfume business enabled François Coty to indulge in the purchase of châteaux, although he lived out his reclusive life in a Paris hotel. One he built for himself is the Château d'Artigny in the Indre valley. He bought the old one in 1912 and razed it to the ground. He dreamed of a chapel that rivalled the one at Versailles, as well as the latest and most luxurious fittings. The new eighteenth century-style pile took until 1929 to finish.

On his death in 1934, his creditors took possession of the Château, then it passed to the Navy Ministry, before the German soldiery were installed after the fall of France. But in 1942 it became an annexe of the Tours general hospital. Coty's daughter ultimately inherited it in 1947 and it was finally purchased by René Taversac who transformed it into a luxury hotel.

The hotel provides a home to the Association François Coty and each autumn, offers a workshop on perfume technology during which the hotel chef prepares meals made with ingredients typically used in perfumery rather than gastronomy!

Apart from this 'memorial', Artigny, he had rented the Château de Longchamps from the city of Paris in the 1920s and he also owned the Château Sainte Hélène in Nice, now a museum of naïve art.

In one Figaro editorial in 1927, Coty warned that "the new nationality legislation puts the whole French nation under a death sentence." In 1933, Francois Coty, an admirer of Italian fascism, launched L'Ami du Peuple, an anti-semitic and pro-fascist newspaper and founded la Solidarité Française. L'Ami cost him a lot, since he sold it below cost, to further his ideas – and when the circulation rose, he reduced the selling price even further. The following year, with ten thousand members, the Solidarité Française movement tried to bring down deomcracy, with the cry of "A bas les voleurs!" (down with the robbers). It failed and he died the same year.

In 1923, he had attempted the organization of a fascist group called the "Blue-shirts." Coty advocated Italo-French amity, and the use of the idea of Latinity as a rallying cry for fascism. Coty's widow and ex-wife, then Yvonne Cotnaréanu, sold half the family holding in the Figaro to Jean Prouvost of the Lille woollen industry family in 1950. She sold the rest of her holdings in 1964 and Prouvost acquired them in 1970, with control finally passing to the Dassault group (aviation/armaments...) in 2004. The paper is now considered rightist/centrist in political terms/

And Dying in Poverty

He died in 1934, riddled with debt, but clearly he had managed to look after his family and the term poverty is relative, when you see the nature of the 'humble' abode of the man. He breathed his last at the ornate Pavillion of Madame du Barry at Lovenciennes, just outside Paris.

This house had been given to Jeanne du Barry by the King, Louis XV, when she became his principal mistress. She ended her days at the guillotine during the French revolu-

tion. No doubt the Royalist connection was not lost on François Coty.

Now his Grandson is Returning to Coty s herbal roots...

Coty's grandson, Henri, has an ambition, at 80, to reinvigorate the production of aromatic plants for perfumery in Corsica. He has a project to set up a centre for the study of such plants at the University of Corsica and to establish a certificate for aromatic and medicinal plants studies. It is important to distinguish the difference between the use of essential oils in perfumery and aromatherapy. There is an Association François Coty (tel +33 4 95 22 52 93).

Henri recently visited Corsica with Steve Mormoris, the senior VP international marketing of Coty Inc, and Armand de Villoutreys, the head of Firmenich, the Geneva-based fragrance and flavour business.

They have conceived a plan to re-create four perfumes from the original range but with modern ingredients as near as possible to the first Coty products.

Natural products; they met with Joseph Casanova who heads up the natural products group at the University's Vignola scientific centre. In pursuit of setting up a botanic garden near Ajaccio, the group also met with Corsican politicians, and discussed the idea of such a garden that could be open to the public to experience the herbal plants of Corsica.

If you want to read more about the use of Corsican aromatic plants, look at the Corsica Isula website on Corsican Essential Oils. There are many producers in Corsica. The picture of the citrus sinensis is by courtesy of Pierre Antoine Alessandri, who uses it to make the essential oil – petit grain d'oranger – a standard ingredient of eau de cologne.

There are already two nurseries that grow endemic aromatic plants and you can visit them both: one is the Figionis' Parc Naturel d'Olvanear Sartene and Stéphane Rogliano's Serres de Ferruccionear Porto Vecchio.

Now the world s largest perfume company is Corsican - by origin!

By a twist of business history, Corsican François Coty's company looks set to become the biggest fragrance group in the world! In May 2005, Unilever sold their perfumes business (Calvin Klein, Lagerfeld, Vivienne Westwood, Chloe and others) to the (now) American beauty company, Coty, for $800 million.

The Coty company is now the New York based Coty Inc, but springs from François Coty's firm originally established in Paris in 1904. It is ultimately owned by Joh A. Benckiser GmbH of Ludwigshafen, Germany.

Bensicker acquired the Coty Beauty brands from Pfizer in 1992. The current Coty Inc was formed in 1996 on the acquisition of the Lancaster Group brands from Beecham of the UK.

The group also includes brands such as addidas, Davidoff, Celine Dion and Jennifer Lopez; it signed a new agreement with David and Victoria Beckham in 2005; it operates in over 25 countries and employs 6500 people. Sales in 2004 were $1.95 billion; in the same year, the unilever brands' sales were $600 million.

The group has two R&D Units (Monaco; Morris Plains, New Jersey, US) and five Production Units (Ashford, UK; Granollers, Spain; Chartres, France; Monaco; Sanford, North Carolina, US); with the Unilever acquisition, they will add a manufacturing and distribution centre in Mount Olive, New Jersey and a distribution centre in Lille.

Bibliography

Ackerman, Diane. A Natural History of the Senses, 1990.
Aftel, Mandy. Essences & Alchemy - A Book of Perfume, 2001.
Arctander, Steffen. Perfume & Flavor Materials of Natural Origin. 1960.
Arctander, Steffen. Perfume & Flavor Chemicals, Volumes # 1 & 2.
Aurora Photos - Perfume Bottles - 20 - 36 Danforth Street, Suite # 216, Portland, Maine 04101.
Bailey, L.J. Hortus, A Dictionary Of Horticulture of North America. 1935.
Bedoukian, Paul Dr. Perfumery & Flavoring Synthetics.
Bedoukian, Paul Dr. Perfumery & Flavoring Materials, Articles, 1945 - 1992.
Bedoukian Research. Distinctive Perfume & Flavor Ingredients.
Black, Penny. The Book Of Potpourri, Fragrant Flower Mixes For The Home.
Brechbill, Glen O., A Reference Book on Fragrance Ingredients, 2005.
Burfield, Tony. The Adulteration of Essential Oils, Globalnet.co.uk, London, 2003.
Burr, Chandler. The Emperor of Scent, A Story of Perfume, & Obsession. 2002.
Bush Boake & Allen, Inc. Aroma & Terpene Products.
Calkin, Robert R. Perfumery Practice & Principles.
Chanel Parfums, The Story of Coco Chanel, 1999.
Clifford, Frank S. Romance Of Perfume Lands. 1881.
Cola, Felix. Book of Perfumery. 1947
Creations Aromatiques Inc., Bases, Essential Oils, Fine Fragrances & Aromatic Materials.
Dana, Star W. How To Know The Wild Flowers. 1995.
Dictionary, The American Heritage Dictionary Of The English Language, 1971.
Dictionary, Webster's Third New International Dictionary, Unabridged.
Donato, Giuseppe & Siefried Monique. The Fragrant Past: Perfumes of Cleopatra and Julius Ceasar. 1995.
Dorland, Gabrielle J. Scents Appeal.
Dorland, Rogers. The Fragrance & Flavor Industry. 1971.
Dragoco. World Class Flavor Ingredients.
Duff, Gail. Natural Fragrances, Outdoor Scents For Indoor Use.
Edwards, Michael. Perfume Legends: French Feminine Fragrances, 1998.
Fabulous Fragrances II, A Guide to Prestige and Perfume For Women & Men, 2001.
Firmenich, Inc. Chemicals & Specialties.
Fragrance Foundation. Fragrance & Olfactory Dictionary & Directory. 1981.
Fragrance Foundation. The History, The Mystery, The Enjoyment of Fragrance.
Fragrance Profiles. Allured Publishers.
French Society Of Perfumers. Fragrance Classification Des Perfumes.

Gaborit, Jean-Yves. Perfumes - The Essences and Their Bottles. 1988.
Gaines, Ann. Coco Chanel. 2004.
Genders, Roy. Perfume Through The Ages. 1972.
Gilchrist, Cherry. The Elements Of Alchemy.
Givaudan Fragrance Corporation. Fragrance Ingredients.
Google Search Engine. Google Inc., 1600 Amphitheatre Parkway, Mountain View, California 94043.
Grant, Junius. Hackh's Chemical Dictionary. 1944.
Groom, Nigel. The Perfume Handbook.
Gunther, Ernest Dr. The Essential Oils. Volumes # 1 & 2.
Haarmann & Reimer. Aroma Chemicals & Specialty Scents.
The H & R Books Of Perfume
1 The H & R Book Of Perfume.
2 Guide To Fragrance Ingredients.
3 Fragrance Guide.
Healy, Orla. Coty - The Brand of Visionary. 2004.
Hiscox, Gardner D. Henley's Twentieth Century Formulas, Recipes, & Processes. 1924.
International Flavors & Fragrances. Perfumers Compendium.
Irvine, Susan. Perfume - The Creation and Allure of Classic Fragrances. 1995.
Jessee, Jill. The Perfume Album. 1972.
Lawless, Julia. The Encyclopedia Of Essential Oils.
Lawrence, Brian Dr. The Journals Of Essential Oil Research. Volumes # 1 - 4.
Maron, Jan. Fabulous Fragrances II: A Guide to Prestige Perfumes for Men & Women. 2000.
Material Safety Data Sheets.
Mauer, Edward S. Perfumes & Their Production. 1958.
Miller, Alan R. The Magical & Ritual Use Of Aphrodisiacs.
Miller, Alan & Iona. The Magical & Ritual Use Of Herbs.
Miller, Alan & Iona. The Magical & Ritual Use Of Perfumes.
Moldenke, Harold & Alma. Plants Of The Bible. 1952.
Moran, Jan. Fabulous Fragrances - The Women's Guide To Prestige Perfumes. 1994.
Morris, Edwin T. The Story Of Perfume From Cleopatra To Chanel. 1984
Muller, Lamporsky. Perfume, Art, Science & Technology.
Naves, Mazuyer. Natural Perfume Materials. 1947.
Newman, Cathy, Kendrick Rob. The Art & Science of Scent. 1999.
Pickles, Sheila. Penhaligon's Scented Treasury Of Verse & Pose.
Pickles, Sheila. A Victorian Posy.
Pickles, Sheila. The Language of Flowers.
PFW Aroma Chemicals. Aroma Chemicals.
Poucher, W.A. Perfumes, Cosmetics & Soaps. Volumes # 1 - 3.
Quest International. A Compendium of Fragrance Ingredients.
Rimelle, Eugene. Book Of Perfumes. 1865.
Robertet. Natural Ingredients.
Scent, by Visionaire Publishing 2004.
Schab, Frank R. & Crowder, Robert G. Memory For Odors. 1995.
Swarthout, Doris. An Age Of Flowers, Sense & Sentiment In Victorian America.

Takasago. Aroma Chemical Compendium.
Theimer, Ernst T. Fragrance Chemistry, The Science Of The Sense Of Smell.
Thompson, C.J.S. The Mystery & Romance Of Alchemy & Pharmacy. 1932.
Thompson, C.J.S. The Mystery & Lure Of Perfume. 1927.
Todd, Pamela. Forget-Me-Not, A Floral Treasury, Sentiments & Plant Lore.
Toller, Dodd. Perfumery, The Psychology & Biology Of Fragrance.
Turin, Lucas. The Secret of Scent, 2006.
Verill, Hyatt A. Perfumes & Spices, History & Soaps, Preparation. 1940.
Yahoo Search Engine. Yahoo! Inc., 701 First Avenue, Sunnyvale, California 94089.
Worwood, Valerie A. The Complete Book Of Essential Oils On Aromatherapy.