Camphor & Allied Products Ltd.
Revenue Breakup

	Major Business Segments :		% Contribution :		Average Steadystate EBITDA Margin
4 th Largest Indian Player →	Fragrance & Flavor Ingredients (A roma Chemicals)	--	36 % of Total Sales	--	13 – 18 %
2 nd Largest Indian Player →	Fragrance & Flavor Blends	--	24 % of Total Sales	--	12 – 18 %
3 rd Largest Indian Player →	Camphor & byproducts	--	37 % of Total Sales	--	7 – 9 %
	Specialty Chemicals	--	3 % of Total Sales	--	14 – 18 %

Entire F&F Industry

Fragrance & Flavor Ingredients

Fragrance & Flavor Blends

Fragrance Ingredients

Synthetic Aroma Chemicals

Essential Oils

(including absolutes, concretes & resinoids)

Natural Aromatic Molecules

Flavor Ingredients

Natural & Synthetic Chemical Flavors

Herbs & Species

Flavor Enhancers

Camphor & Allied present in these segments of F&F Ingredients.

Oriental Aromatics present in this segment

Getting Merged

Entire Industry Cycle

from **Building Blocks** to **Aroma Chemicals** to **F&F Blends** to **Home, Personal Care & Other Products**

Synthetic Aroma Chemical & Flavor Manufacturers.

Raw Material Source	Building Blocks	Key Indian Players in each sub-segment	F&F Formultors	End-Clients
Petrochemical	▪ Naphthalene ▪ Cresol ▪ Catechol ▪ Styrene ▪ Isobutene ▪ Phenol ▪ Toluene	Eternis Fine	Givaudan, IFF, Firmenich, Symrise, Mane, Takasago, Sensient, Frutarom, SH Kelkar, Oriental Aromatics, (which is getting merged with Camphor & Allied) etc.	Unilever, Godrej, P&G, ITC, Nirma, Henkel, Colgate, KeoKarpin, Dabur, Marico, etc.
Pine Tree	▪ Alpha Pinene ▪ Beta Pinene ▪ Longifolen Derivatives	Privi Organics, Anthea Group, Camphor & Allied		
Musk	▪ Musk	Camphor & Allied		
Others	▪ Lower Esters ▪ Adipic Acid ▪ Others	Camphor & Allied, Anthea Group (both expanding into this space)		

Synthetic Aroma Chemicals & Synthetic Flavor Ingredients
Key Segmentwise Data

Raw Material Source	Building Blocks	Value %	Volume %
Petrochemical	▪ Naphthalene ▪ Cresol ▪ Catechol ▪ Styrene ▪ Isobutene ▪ Phenol ▪ Toluene	34 %	48 %
Pine Tree	▪ Alpha Pinene ▪ Beta Pinene ▪ Longifolen Derivatives	37 %	34 %
Musk	▪ Musk	13 %	7 %
Others	▪ Lower Esters ▪ Adipic Acid ▪ Others	16 %	11 %
		USD 3.8 bn.	3,30,000 MT

Eternis'
95 % of F&F Ingredients
Revenue comes from
these two segments.

Privi & Anthea'a
75 % + of F&F Ingredients
Revenue comes from
this segment

95 % from these two segments

Camphor & Allied's
45 % of F&F Ingredients
Revenue comes from
this segment and is the only
Major Indian Standalone Player
in said segment.

Camphor & Allied and Anthea
are expanding in this segment

Synthetic Aroma Chemicals & Synthetic Flavor Ingredients
Who Manufactures & WHY ??

Most Advantageous,
Strong R&D

F&F Blend Manufacturers

(like IFF, Givaudan, Firmenich, Symrise, SH Kelkar, etc.)

-- Largest Group --
Driven by Necessity
of F&F Blenders
To get Ingredients at
Most Economical Rate

Standalone F&F Ingredient Manufacturers

(like Privi, Eternis, Anthea, Camphor & Allied, etc.)

-- Minority --
Driven by Efficient
Use of Available
Resources

Other Players

Feedstock Availability

(like Wood Pukp & Paper Industry or Petrochemical Industry Players)

Common Intermediates

(like some Pharmaceutical Industry Players)

Technology

(like Fine Chemical Companies)

Synthetic Aroma Chemicals & Synthetic Flavor Ingredients
Key Indian Standalone Manufacturers' Important Data

	Privi Organics	Eternis Fine Chemicals	Anthea Group	Camphor & Allied
Capacity	22,000 MT/p.a.	20,000 MT/p.a.	13,000 MT/p.a.	8400 MT/p.a.
FY15 Revenue	549 cr.	450 cr.	316 cr.	165 cr.
Key Products	Amber Fleur Dihydromyrcenol Citronellol	Amber Fleur PTBCHA OTBCHA	Amber Fleur Dihydromyrcenol	Galaxolide Musk Alpha Pinene Epoxide
	3 Products Contribute 56 % to Revenues	3 Products Contribute ~ 55 % to Revenues	2 Products Contribute 71 % to Revenues	2 Products Contribute ~ 60 % to Revenues

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Key Product Realisation Value – Average of preceding 2 Years as at 1st November 2016

Amber Fleur = 3.78 Lakh per MT

Dihydromyrcenol = 3.28 Lakh per MT

Citronellol = 6.52 Lakh per MT

PTBCHA = 1.76 Lakh per MT

OTBCHA = 1.91 Lakh per MT

Alpha Pinene Epoxide = 3.23 Lakh per MT

Galaxolide Musk (AstroMusk) = 4.05 Lakh per MT

Musks

What it is ??

Musk is one of the most common and important element of any Fragrnce Blend.

Its Importance :

90 % of all the Fragrance Blends used as either standalone perfume or into various Personal & Homecare & Other FMCG Products contains Musk.

Musk is added to :

Soaps, Shampoos, Powders, Cosmetics, Bath Oils,

Toothpastes, Household Cleansers, Laundry Detergents, Insect Repellents and

even majority of the artificially flavored Food.

In short, Musk is used as an ingredient in almost every commercial product that requires Fragrance.

Why Musk finds such a wide use ??

Musk not only serves as a key fragrance component, but, it also balances and amplifies the effect of other constituents of the blend.
It also acts as a key fixative. Without musk, volatile ingredients of which a fragrance blend is composed of, don't cast the desired prolonged effect.

Sources of Musk :

In old times, Musk came exclusively from animal sources like from various species of Musk Deer. However, today, animal sources have complely disapeeared because of ethical and cost reasons. Hence, most Fragrance Blends today make use of some form of Synthetic Musks ; but, still, there are few blends which make use of natural sources, especially from plant origin. Musk from natural sources Is extremely expensive and therefore
90 % of the Musks used today in Fragrance Blends are of Synthetic Origin.

Types of Musks

Nitro Musks

- Musk Xylene
- Musk Ketone
- Musk Ambrette

Getting Phased Out because of hazards it can cause.

Use has dwindled from as high as 80 % to Less than 10 % of all the musks used today worldwide.

Polycyclic Musks

- Galaxolide
- Tonalide
- Celestolide
- Fixolide
- Traesolide

Largest class of Musks in use today.

70 %+ of all the musks used today worldwide are Polycyclic Musks.

80 % + of all Polycyclic Musks in use today comprise of these two varieties.

Macrocyclic Musks

- Musk T
- Habanolide
- Ambrettolide
- Exaltolide
- Velvione

Relatively Expensive than Polycyclic Class but its use is increasing every passing year because of relatively less hazards it poses as compared to Nitro & Polycyclic Musks.

Alicyclic Musks

- Helvetolide
- Romandolide

4th Generation Musks & relatively novel one. Thier Use & Production is still comparatively very limited.

Positioning in Musks Segment of Camphor & Allied Products Ltd.

Nitro Musks | Polycyclic Musks | Macrocyclic Musks | Alicyclic Musks

35 % of the Baroda Plant Capacity dedicated to these two Musks,

Enjoys ~ 30 % Global Marketshare in Galaxolide Musk

Capacity Break-up of Aroma Chemical Division of Camphor & Allied Products Ltd.

Polycyclic & Macrocyclic Musks	35 %
Specialty Aroma Chemicals	23 %
Bulk Aroma Chemicals	42 %

Fragrance & Flavor Blends' Industry
Why Clients are so Sticky ??

FMCG Company **Plans to Launch a Product** – Say a Soap

↓

Fragrance Brief
is made and sent to Fragrance Houses like SH Kelkar & Oriental Aromatics.

↓

On receipt of Brief, Fragrance House's perfumer
initiates process to develop the required fragrance
by employing the already huge inventory of RMs stocked with the Fragrance House as also dwelling into the library of Fragrances company has already generated so far via 'Internal Briefs'.

↓

Different Ratios are developed of varied ingredients to develop different versions of a Fragrance
– typically **10 to 100 versions are made to develop one required fragrance**.

↓

All Versions are sent to Fragrance House's **Internal Specialists to smell and screen**.

↓

Specialists shortlist the best versions amongst them and those shortlisted versions are sent to FMCG company for evaluation.

↓

FMCG company's internal specialists evaluate the versions.
If briefs are sent to more than one Fragrance House then sent fragrance samples of both the houses are evaluated.

↓

FMCG company's internal specialists
shortlist only one sample of Fragrance out of all sent for its likely product launch
and intimate of any changes, if required, even in that sample.

↓

Required modifications are made by the Fragrance House and
supply arrangments with FMCG company gets established.

↓

Till the said FMCG Product remains in production, 99 %, the suppplier and ingredients of the fragrance are never changed in its entire lifecycle.

With Brand success you grow

Customer becomes your Permanent Customer

Fragrance Brief includes details like :

Detailed Product Description –
Proposed Brand Name,
Likely Market Position,
Marketing Strategy,
Consumer Profile,
Product Usage, etc.

Fragrance Description --
Functional & Emotional Benefits desired,
Fragrance Perception during Product Use,
Substantivity Profile,
Ingredient Restriction, if any
(like only natural or maximum % use of synthetic),
Minimum Action Standards,

Test Protocols --
In-house or External,
Target,
Screening Process,
Final Test Protocols,
Positive & Negative Controls,
Action Standards,
Test Samples – Small or Full-sized packs ??
Identified or Blind ?

Safety & Regulatory requirements,

Technical Requirements,

Timing --
Project Timetable,
Deadline,
Interim Submissions,
Final Submissions.

Price Structure --
Fragrance Cost Target – per tonne of finished product,
Fragrance Dosage Limits,
Pro Rata Limits.

Post Submission Requirements.

Fragrance & Flavor Blends' Industry
Key Players in Indian F&F Blends Market
-- A 10 Years' Perspective --

Oriental Aromatics
consistently maintained its
overall sixth position
&
2nd Largest Indian-origin player
after SH Kelkar position
in the industry despite all odds.

	2005 Marketshare of Key Players		2015 Marketshare of Key Players
MNC Players' Marketshare is overstated as Market-Size doesn't include multiple small Indian players in Agarbatti & other allied FMCG areas.	IFF	24.79 %	IFF 14.66 %
	Firmenich	14.62 %	Firmenich 13.63 %
	Givaudan	14.58 %	Givaudan 19.24 %
	Symrise	13.81 %	Symrise 9.14 %
Indian Players' Marketshare is understated as Market-Size doesn't include multiple small Indian players in Agarbatti & other allied FMCG areas which are the focus areas of Indian players and not MNCs	SH Kelkar	18.13 %	SH Kelkar 11.42 %
	Oriental Aromatics	3.71 %	Oriental Aromatics 2.16 %
	Khattri	3.17 %	Khattri 0.01 %
	Goldfield	2.82 %	Goldfield 1.12 %
	Gupta & Co.	2.03 %	Gupta & Co. 0.72 %
	Sachee Aromatics	0.86 %	Sachee Aromatics 0.72 %
	Ultra International	0.78 %	Ultra International 0.93 %
	Frutarom	0.56 %	Frutarom 0.55 %
	Mane	0.14 %	Mane 1.67 %
	Takasago	0 %	Takasago 0.31 %
			Aarav Fragrances 1.17 %

MNCs have lost
9.30 % Marketshare
over a 10 Year period
from 2005 to 2015.

SH Kelkar slipped from
No. 2 position in 2005
to
No. 4 position in 2015
mainly because of Family split
which gave rise to other small companies
from the same family
like Aarav Fragrances, Aquilla, etc.

Key Indian players of 2005
have lost
13.25 % Marketshare
over a 10 Year period
from 2005 to 2015.

Although every top player
of the industry, barring Givaudan,
lost marketshare
over a 10 year period, its the players from
7th poisition onwards that suffered the most.

Fragrance & Flavor Blends
Key Indian Players' Important Data

	Givaudan	IFF	Firmenich	SH Kelkaar	Symrise	Oriental
Institutional Holding	21 %	39 %	Private	38.4 %	20 %	0 %
EV/EBITDA TTM	18.37	16.66	Unlisted	28.41	17.55	Soon To be listed
EV/Sales TTM	4.47	3.92	Unlisted	4.75	3.86	Soon To be listed
P/E TTM	29.89	25.90	Unlisted	52.13	35.59	Soon To be listed
FY05 EBITDA %	12.76 %	24.07 %	10.96 %	23.94 %	16.74 %	22.83 %
FY15 EBITDA %	15.55 %	18.43 %	11.36 %	14.25 %	15.01 %	11.60 %
Indian Revenue CAGR :						
10 Years'	22.08 %	9.48 %	14.55 %	10.21 %	8.92 %	8.75 %
5 Years'	15.74 %	11.59	22.01 %	11.51 %	12.97 %	11.03 %
3 Years'	11.02 %	7.12 %	8.83 %	14.27 %	16.17 %	11.77 %

Fragrance & Flavor Blends
Barriers to Entry

Difficult-to-Duplicate Research & Technical Capabilities

[Each Fragrance & Flavor Blend created for a particular product is unique with its own mix of ingredients and their precise mix ratio. Each of the individual ingredients (which normally number close to 500 +) are never listed on the product label (in which it is used) nor its ratio is disclosed which makes each blend the IP of its creating company.]

Backward Integration into manufacture of F&F Ingredients -- a Prime Necessity for Success

[There is considerable pressure on a F&F company to create best unique Fragrance/Flavor blend in the most cost effective way ---– only the companies which can achieve this consistently find place in the long-term supplier list of key Personal & Home Care clientle. For achieving this, backward integration into manufacture of F&F ingredients becomes a must as it is actually the cost and the ratio of the ingredients used that ultimately determine the uniqueness and the cost of final F&F Blend. It is the R&D strength of a F&F company in ingredients space that speaks highly in the form of unique final F&F Blend formulated by the company. This is the reason why we find each of the successful major F&F company like IFF, Givaudan, Firmenich, Symrise, SH Kelkar, Oriental Aromatics, etc. running two businesses simultaneously under its fold – one of manufacture of ingredients and other of formulating of Blends.]

Multi-Year Operational History to enable creation of large pool of Internal Fragrance Library & Access to Large Range of Ingredients

[Successful Businesses tend to have cultures of product innovation that have operated successfully over the course of decades. F&F companies need access to very large range of raw materials, both standard & exotic as well as access to the latest new RM formulations and additions --- each F&F blend is formulated by mixing atleast 500 different RMs.

Also, F&F company needs to be proactive as far as formulation of unique Blends are concerned. Its not that the company has to wait for the client for intimation of any of its product launch and then start formulating blends for such product. Company has to create beforehand an internal library of industry/application -specific unique blends and also from time-to-time send samples of such blends to its clientle for evaluation purpose to vet the chance of improvisation of any existing product or incorporate such blend in any planned forthcoming new product.

It is extremely difficult for new entrants to build these kind of capabilities quickly.]

Synthetic Aroma Chemicals & Synthetic Flavor Ingredients
Barriers to Entry

Stringent Environment Protection Laws & Safety Considerations

[one of the most stringently regulated industry -- only second to Pharmaceutical Industry]

Low Per Product Production Scale

[hardly few products reach 10,000 MT p.a. global production quantities.
Blends which use these ingredients are each composed of more than 500 individual ingredients
and so required quantities of each product per blend is very less.]

Pricing Pressure on almost every product, even Specialty ones

[Cost restraints on the industry are ultimately imposed by consumer.
For ex., many blends which use these ingredients, go into products such as Soap & Laundry Powder,
and the cost of such blends forms significant part of overall cost for the said products.
If price of one product is not acceptable, consumer selects competitive brand.
Hence, manufacturer of said products puts considerable pressure on F&F blends' supplier
to develop the most effective Fragrance at the lowest possible cost.]

Tough Audit Requirements to become a supplier to MNCs at global level.

(70 % of the global F&F market, including India, controlled by MNCs)

[It normally takes many years to forge a meaningful supply-relationship with any MNC and scaling up supply quantities from kilos to tonnes.

Camphor & Allied Products Ltd.

Aroma Chemicals Segment Factsheet :

Basics :

Aroma chemicals are Key ingredients used in Fragrance & Flavor Blends

Key Clients :

Agan Aroma, IFF, Firmenich, Givaudan, Symrise, SH Kelkar

Positioning :

4th Largest player in India after Privi Organics, Eternis and Anthea group.

Segmentation :

Bulk Aroma Chemicals	---	EBITDA Margins = 8-13 %
Specialty Aroma Chemicals	---	EBITDA Margins = 16-20 %

Current Contribution to Sales :

Bulk Aroma Chemicals	---	38 %
Specialty Aroma Chemicals	---	62 %

Focus :

Profitability & Stability

Profitability

Entire expansion as well as acquisition into only Specialty Aroma Chemical segment.

As per Management, almost entire future expansion, if any, will be on products delivering EBITDA margins of 17-18 %+.

Stability

Tied up with Agan for Galaxolide musk and ensured firm offtake of expanded capacities.

Tied up with IFF post which acquired Arofine & undertook further expansion.

Camphor & Allied Products Ltd.

Fragrance & Flavor Blends Segment Factsheet :

Basics :

Fragrance & Flavor blends are key small components of every FMCG products..

Key Clients :

Godrej, Nirma, Dabur, Bajaj, Keokarpin, Pfizer, Abbott, Wockhardt, Wyeth

Positioning :

2nd Largest Indian-origin player after SH Kelkar & overall 6th Largest player in India after Givaudan, IFF, Firmenich, SHK & Symrise.

Focus :

Profitability

Aroma Chemicals form 80 % of the RM cost. Company gaining inhouse manufacturing capability to produce 70 % of its total Aroma Chemical requirement.

Commissioned state-of-the-art R&D centre in FY15 and gained all quality certifications to penetrate MNC clientle.

Camphor & Allied Products Ltd.

Camphor Segment Factsheet :

Basics :

Synthetic Camphor is Key ingredient used in many pharmaceutical formulations as well as for regional purposes.

Key Clients :

P&G (80 % of the camphor requirement of 'Vicks' brand met by CAP),

Johnson & Johnson (J&J), Welding GMBH & CO. KG Germany, Aventish Pharma, Novartis, Perrigo Laboratories, SSL International, Select Chemie, PZ Cusson,

Wyeth, Reckitt & Benckisher, Throtan & Ross, Ayanda Qy – Finland, Association forum Auditorias (AFA), Frey & Lau, J.B. Chemicals & Pharmaceuticals Pvt. Ltd.

Positioning :

Largest player in Pharma-grade Camphor in India & 3rd Largest player in India after Mangalam Organics & Saptagir

Focus :

Profitability & Stability

Over years has become one of the largest supplier of Pharma-grade camphor which enjoys premium realisation as well as stable contract-based revenue.

Synthetic Camphor Business
Key Indian Players' Important Data

	Mangalam Organics	Saptagir	Kanchi Karpooram	Camphor & Allied
TTM Revenue	201 cr.	208 cr.	56 cr.	170 cr.
13 Years' Average EBITDA %	6.88 %	14.38 %	6.44 %	n.a.
13 Years' Average Sales/Gross-Block	1.89	3.17	2.61	n.a.
TTM Sales/Gross-Block	2.34	3.78	3.79	n.a.
TTM Debt/Equity	1.51	0.70	1.84	0.68
Average EV/Sales TTM commanded since the time Shares are listed on Stock Exchanges	0.41 (14 Years)	Unlisted	0.42 (3 Years)	n.a.
CAGR in Revenues :				
12 Years'	12.29 %	20.39 %	9.92 %	9.78 %
5 Years'	1.02 %	10.72 %	6.44 %	3.41 %
3 Years'	- (1.29) %	8.46 %	6.44 %	5.24 %