

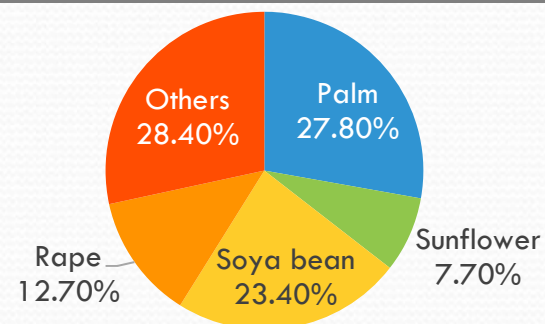


About Fairchem
Aroma Chemicals
Oleo Chemicals & Nutraceuticals
Financial Overview

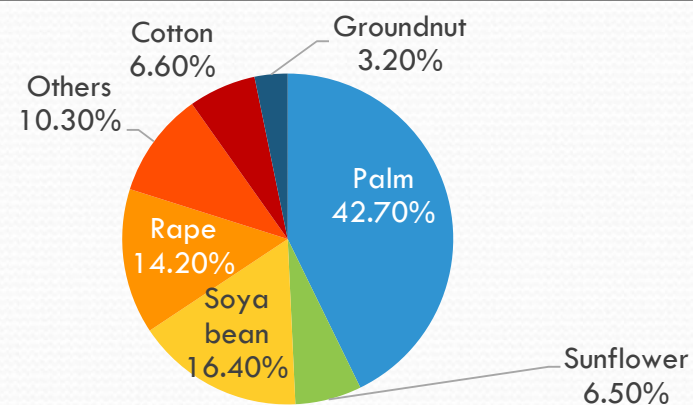
Oleo chemicals Industry

- The oleo chemicals market is broadly segmented into four key applications markets:
 - Pharmaceutical & personal care,
 - Food & beverages,
 - Soaps & detergents,
 - Polymers
- Pharmaceutical & personal care is the largest application market for oleo chemicals accounting for majority of the share.
- Growing biochemical product demand in various consumer applications such as personal care, detergents, and food & beverages is expected to remain a key factor driving growth.
- The global oleo chemicals market is expected to reach USD 30.15 billion by 2024 from USD 20 billion in 2015.
- Asia Pacific is the leading consumer of oleo chemicals with demand share exceeding 40% in 2015. The region is also expected to witness the fastest growth over the next few years owing to abundant raw material supply and significant developments in the application markets.

World Production of Leading Oil & Fat, 2015



India's leading consumption of Leading Oils



Oleo chemicals Industry in India

- Indian Oleo Chemical players are well positioned with abundant raw material supply, lower manpower cost and improving infrastructure which should be the key market drivers for the industry at large.
- Fatty acids, Fatty Alcohol and Methyl Ester and Refined Glycerin are basic Oleo Chemicals which then go into end use application of Surfactant, Soap and Detergents, Cosmetics, Food Emulsifiers, Paints and Inks & Lubricants.
- In India while processing crude soft vegetable oils like SSCC, Groundnut and Rapeseeds 3 key products are generated by these oil refineries
 - Prime Oil (~98.5%)
 - Acid Oil (AO) (~1.25%)
 - Deodorizer Distillate (DOD) (~0.25%)
- The Prime Oil is converted into oils for edible purpose and AO and DOD which are composed of Free Fatty Acids, Mix Glycerides and other important nutraceutical products are sold to chemical companies to derive fatty Acids
- AO from different sources of Vegetable Oil can generate varied Fatty Acids that have different applications

Oils	By-product	Fatty Acids	Application
SSCC, Groundnuts, Rice Bran & Rapeseeds	Acid Oils	Palmitic, Linoleic, Dimer, Monomer	Inks & Paints, Epoxy hardeners
SSCC, Groundnuts, Rice Bran & Rapeseeds	Deodorizer Distillate	Mixed Tocopherol, Distilled Fatty Acids	Natural Vitamin E Low grade resins and Soap'
Palm, Palm Kernel & Coconut	Deodorizer Distillate	Stearic, Lauric , Distilled Fatty Acids	Soap Noodles, Rubber Tyre, Cosmetic

SSCC - Soya, Sunflower, Corn and Cotton