



---

# PINE CHEMICALS

# BROCHURE

---

# About Us

Tradeasia International Pte. Ltd. is a privately owned, independent company headquartered in Singapore. We are a global trading organization providing integrated chemical procurement services with certainty and trust, which makes Tradeasia unique.



Tradeasia International was setup with the sole intention of carrying out chemical distribution services especially to commodity industries in many parts of the world. Today, Tradeasia International represents a growing number of businesses that are serving a variety of markets. We source and supply about 500-600 containers monthly to our customers worldwide.

12

**Locations**

50+

**Suppliers**

500+

**Products**

400+

**Clients**

# Oleo Pine Resin

Oleo Pine Resin is a natural mixture of oil, carboxylic acid and oxygenated product of terpene derived from Pine tree. These resins are in liquid gummy form in early stage, but it hardens with time and treatment. The resins compounds are classified in differently depending on its chemical composition and its application. Resins produced from pine are known as naval storage.

HS Code : 1301.90.90.00  
CAS No. : 8050-09-7  
Origin : Indonesia  
Packaging : 105 @ 200 kg Drum with Plastic Inner, 21 MT / 20'FCL



## Specifications:

Property	Unit	Value
Appearance		Light green liquid
Moisture and Water	%	9.49
Turpentine Oil	%	14.19
Gum Rosin	%	71.16
Impurities	%	5.16

## Applications :



### Food Industry

Oleo pine resins are used as food glazing agents.



### Turpentine Oil Manufacture

It is used as a raw material to get turpentine oils which are used in perfume, camphor, cosmetics and varnish industry.



### Paint Industry

Oleo pine resins are easily soluble in alcohols and other solvents and they have high refractive index which makes them glossy. Therefore, oleo pine resins or their derivatives are major component in paint industry.



### Gum Rosin Manufacturing

Oleo pine resin is used as raw material to get gum rosin which has variety of applications in paint and varnish, adhesive, soap, paper and as an intermediate for organic compounds and modified resins.



### Therapeutic Uses

Oleo resins such as copaiba is used to treat stomach cancer and ulcer. It is used for therapeutic purpose and incense.

# Gum Rosin

Gum rosin is an organic compound of monoterpene, turpentine and resin acid. Also known as colophony or rosin, it is a solid form of pine oleoresin from pine trees (mostly conifers). It is produced by heating fresh liquid resin in order to vaporize the volatile liquid terpene components.

HS Code	: 3806.10.10
CAS No.	: 8050-90-7
Origin	: Indonesia, Brazil
Packaging	: • 720 @ 25 kg Paper bag, 18 MT / 20'FCL • 80 @ 225 kg Galvanized Iron Drum, 18 MT / 20'FCL

## Specifications - Indonesia Origin:

Property	Unit	Value			
		K Grade	WG Grade	WW Grade	X Grade
Appearance		Transparent solid, yellow red	-	-	-
Color by Lovibond Comparator		-	WG	WW	X
Softening Point (R&B)	°C	74.0 (min)	76 (min)	78 (min)	78 (min)
Impurity/Solubility in Toluene	%	-	0.07 (max)	0.05 (max)	0.02 (max)
Acid Value	mg KOH/g	164.0 (min)	160 - 190	160 - 190	160 - 190
Alcohol Insoluble	%	0.04 (max)	-	-	-
Unsaponifiable Matter	%	6.0 (max)	-	-	-
Saponification Value		-	170 - 220	170 - 220	170 - 220
Iodine Value		-	5 - 25	5 - 25	5 - 25
Volatile Oil Content	%	-	2.5 (max)	2 (max)	2 (max)
Ash Content	%	0.04 (max)	0.05 (max)	0.04 (max)	0.01 (max)

## Specifications - Brazil Origin:

Property	Elliotti		Hybrid		Tropical	
	Typical	Specification	Typical	Specification	Typical	Specification
Gardner Color	6	7 Max	6	7 Max	7	10 Max
Color US Standard	X	WW Max	X	WW Max	WW	M Max
Acid Number (mg KOH/g)	165	160 - 178	168	165 - 178	169	163 - 181
Softening Point (°C)	74	70 - 78	77	73 - 78	79	72 - 81
Solubility in Ethanol	Soluble	Soluble	Soluble	Soluble	Soluble	Soluble
Saponification Number (mg KOH/g)	166 - 181		169 - 178		166 - 184	
Total Resinous Acids (%)	85 Min.		87 Min.		90 Min.	
Density (g/cm³)	1.06 - 1.09		1.06 - 1.09		1.06 - 1.09	
Volatile Oils Content (L/100kg)	1.0 Max.		1.2 Max.		1.2 Max.	
Insoluble in Toluene (%)	0.05 Max.		0.05 Max.		0.05 Max.	
Ash (%)	0.1 Max.		0.1 Max.		0.1 Max.	

## Applications :



### Adhesive Industry

Rosin mainly is used to enhance the strength, plasticity and viscosity of adhesive.



### Electric Equipment Industry

Rosin is used as an insulation material in electric equipment industry.



### Paint & Coating Industry

Rosin is a basic material for paint industry because it dissolves easily in alcohol, gasoline, turpentine and other organic solvents.



### Metal Processing Industry

Rosin is used as a soldering aid and metal polishing agent.

# Turpentine Oil

Turpentine oil with molecular formula  $C_{10}H_{16}$ , is a transparent colorless thin volatile liquid which has a characteristic odor. It is also known as spirits of turpentine and oil of turpentine. It is the main constituent of pine tree obtained by the distillation of resins of living pine tree. The important pines used for the production of turpentine oil are Longleaf pine and Maritime pine.



HS Code : 3805.10.00  
 CAS No. : 8006-64-2  
 Origin : Indonesia  
 Packaging : • 100 @180 kg drum, 18MT/ 20'FCL  
 • 106 @ 170 kg Plastic Drums, 18.02 MT / 20'FCL

## Specifications:

Property	A	B
Specific Gravity at 25°C	0.848 - 0.865	0.848 - 0.865
Refractive Index at 20°C	1.464 - 1.478	1.464 - 1.478
Flash Point	33 - 38 °C	33 - 38 °C
Distillation Temperature at 760 mmHg	150 - 160 °C	150 - 160 °C
Residue After Evaporation	≤2%	>2%
Distillate Under Temperature 170°C	≥90%	<90%
Colour	Clear liquid	Clear liquid
Alpha Pinene Content	≥80%	<80%
Beta Pinene Content	≥1%	≥1%
Acid Value	≤2%	>2%
Optical Rotation	+≥32	+<32

## Applications :



### Solvent Agent

Turpentine oil is used as a solvent for phosphorus, wax, rubber, sulfur etc. It is also used as a solvent in oil paints as it maintains the oiliness of the color.



### Cleaning Agent

The antiseptic properties in turpentine make it a very good cleaning product to use to get rid of bacteria and germs on many different surfaces.



### Pharmaceutical Industry

Turpentine oil is applied to the skin to reduce joint pain, muscle pain, nerve pain and toothaches.



### Other Applications

They are also used in, perfumery products, shoe polish, pressure sensitive tapes.

# Alpha Pinene

Alpha pinene ( $\alpha$ -pinene), also known as ex-turpentine, is a bicyclic terpene hydrocarbon. It belongs to the terpene class, and is one of two isomers of pinene. They appear to be clear and colorless with a characteristic odor of pine. Alpha pinene is the most widely existing terpenoid in nature with the lowest boiling point, most diffusive odor, and has poorest tenacity among the monoterpenes.



HS Code : 2902.19.00  
CAS No. : 80-56-8  
Origin : China  
Packaging : 800 @ 25 kg HM-HDPE Carbuoys,  
20 MT / 20'FCL

## Specifications:

Property	Unit	Value
Appearance		Clear colourless to slightly yellowish liquid
Purity	%	95 (min)
Density at 20°C	g/cm <sup>3</sup>	0.855 - 0.860
Optical Rotation		-36 deg, 10cm
Flash Point	°C	34
Refractive Index at 20°C		1.460 - 1.473
Boiling Range	°C	154 - 157

## Applications :



### Disinfectants

They are strong disinfectant, sanitizers and deodorizers. Their fresh pine fragrance kills odor producing fungi and bacteria and neutralizes unpleasant odor.



### Pharmaceutical Industry

Alpha pinenes have anti-inflammatory and antimicrobial properties and is used in the treatment of skin diseases such as eczema and other skin ailments.



### Chemical Intermediates

Alpha pinene is used as the starting material for the synthesis of terpene resin, synthetic plastics, synthetic lubricant and in aromatic chemicals such as camphene, etc.



### Food Industry

It is used as a food additives and acts as a flavoring agent. Alpha pinene gives pine-like taste and odor. It is used to daily flavor of bergamot, bay leave and other edible flavor.

# Beta Pinene



Beta pinene, also known as Rosemarel, is an organic compound. It is a colorless oil type liquid with a woody green pine like smell. Beta pinene is the most abundant compound which is released from forest trees. Beta pinene exist as enantiomers in nature and both the enantiomers (Levorotatory and Dextrorotatory) are recognized.

HS Code : 2902.19.00  
CAS No. : 127-91-3  
Origin : India  
Packaging : 112 @ 175 kg Galvanized Iron Drum, 20.16 MT / 20'FCL

## Specifications:

Property	Unit	Value
Appearance		Colourless liquid
Purity	%	90
Density at 20°C	g/cm <sup>3</sup>	0.8605
Optical Rotation	°C	+0.55
Flash Point	°C	36
Refractive Index at 20°C		1.485

## Applications :



### Perfume Industry

Beta pinene is used as raw material for the synthesis of synthetic fragrance. It is most important chemicals in the perfume industry.



### Soap & Detergent Industry

Geraniol is a popular floral note prepared from beta pinene. This geraniol and its derivate are used in soap and detergent industry to add fragrances.



### Pharmaceutical Industry

Beta Pinene is widely used in pharmaceutical industry as body massage oil and treats disease such as Rheumatism.



---

# CONTACT US

133 Cecil Street, #12-03 Keck Seng Tower,  
Republic of Singapore - 069535

Tel : +65-62276365

Fax : +65-62256286

Email : [contact@chemtradeasia.com](mailto:contact@chemtradeasia.com)

---

