

Product Specification Sheet

Pine Oil 50%

CAS No.: 94266-48-5



Product Description

Pine Oil 50% is a versatile industrial chemical and an essential by-product of the hydration process used to manufacture high-purity terpineol from gum turpentine. As a secondary fraction of this chemical synthesis, it contains a balanced mixture of terpene alcohols and hydrocarbons. It is valued across various industries for its powerful solvent properties, characteristic pine aroma, and cost-effectiveness in large-scale applications.

Production Process

- **Hydration Phase:** Crude gum turpentine is reacted with water in an acidic environment to facilitate the conversion of pinene into terpene hydrates.
- **Dehydration and Fractionation:** Using the phosphoric acid dehydration method, intermediate products are processed into a mixture of alcohols and terpenes.
- **Grading:** During distillation and refinement of terpineol, various fractions are separated. Pine Oil 50% represents the grade where alcohol content is standardized to a minimum of 50%.

Physical Characteristics and Appearance

- **Appearance:** Light yellow to slight yellow oily transparent liquid
- **Odour:** Strong pine-like scent
- **Color:** Gardner color value 6 max.
- **Stability:** Stable under recommended storage conditions

Technical and Physical Properties

Property	Specification
Alcohol Content	50% min.
Specific Gravity (20°C)	0.870 – 0.900
Distillation Range	168°C – 230°C (95% v/v min.)
Water Content	1% max.

Industrial Applications

- Cleaning and disinfectants
- Mineral flotation
- Solvents and coatings
- Textile processing

Safety and Handling

- Classified under UN 1272
 - Avoid open flames and sparks
 - Use protective equipment
 - Store in galvanized drums
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