

SPECIFICATION

Product Name: Menthol Crystal Medium
Chemical Formula: $C_{10}H_{20}O$
CAS Number: 2216-51-5
Molecular Weight: 156.27 g/mol
Appearance: Colorless, Prismatic or Acicular and Shiny
Odor: Strong, characteristic minty odor, Refreshing and cooling aroma

Chemical Composition

Parameter	Unit	Typical Value
Melting Point	°C	40°C - 43°C
Taste	-	Cool sensation in mouth
Appearance of solution	-	Solution is clear and colorless
Specific optical rotation	°C	-49.26°
Purity by GC (In house)	%	99.26% 99.60%
Non - volatile matter	%	0.025%
Sieve analysis	-	Passing through 10 Mesh

Physical Properties

- Solubility: Practically insoluble in water, very soluble in ethanol 96% and in light petroleum, freely soluble in fatty oils and in liquid paraffin, very slightly soluble in glycerol.

Shelf Life & Storage

- Shelf Life: 5 years from date of manufacture under recommended storage.
- Storage Conditions: Store in a cool, dry, and well-ventilated place. Keep container tightly closed to prevent loss by sublimation. Protect from heat and direct sunlight. Keep away from strong oxidizing agents. Prefer storage at temperature below 25°.

Applications

- Use: Acts as a topical analgesic (pain relief) in balms and ointments. Used in cough syrups, lozenges, and inhalers for cooling and soothing effect. Provides a decongestant sensation in cold medications. Used as a flavoring agent in confectionery, chewing gum, and beverages.
- Dosage: Should be optimized based on desired cooling intensity and product safety.

Packaging

- Standard Packing: 25 kg Fiber Drum, 1Kgs and 100grams, or as per customer requirement.
- Labeling: Product name, batch number, net weight, manufacture date, expiry date, and manufacturer details.

* Specifications are based on the manufacturer's provided specifications.