

Menthol / Camphor

Active coolant and counter-irritant

Product Description

Pharmaceutical-grade Menthol and Camphor are used as cooling agents and counter-irritants in topical analgesic creams, balms, inhalants and cough preparations. Available to BP/USP standards.

Certificate of Analysis

HSN Code: 2906.19

CAS Number: Menthol: 89-78-1 / Camphor: 76-20-8

Classification: Pharmaceutical Active – Topical

Parameter	Specification	Test Method
Appearance (Menthol)	Colorless to white crystalline solid	Visual
Appearance (Camphor)	White crystalline solid or powder	Visual
Assay (Menthol)	99.0–101.0%	GC
Assay (Camphor)	96.0–101.0%	GC
Melting Point (Menthol)	41–44°C	Capillary tube
Melting Point (Camphor)	174–177°C	Capillary tube
Specific Optical Rotation (Menthol)	-49° to -50° (c=10, EtOH)	Polarimetry
Specific Optical Rotation (Camphor)	+41° to +43° (c=10, EtOH)	Polarimetry
Loss on Drying	"d 0.5 %	USP <731>
Heavy Metals	"d 20 ppm	ICP-MS

Physical Properties

Appearance: Colorless to white crystalline solid (both)

Odor: Menthol: characteristic minty cooling odor; Camphor: characteristic camphoraceous odor

Molecular Formula: Menthol: $C_{10}H_{18}O$ / Camphor: $C_{15}H_{26}O$

Molecular Weight: Menthol: 156.27 g/mol / Camphor: 152.23 g/mol

Solubility: Both practically insoluble in water; freely soluble in ethanol and ether

Packing: 25 kg HDPE drums or fibre drums with inner PE liner; 1 kg / 5 kg aluminium bags for pharma

Storage: Store in cool (below 20°C), well-ventilated area away from heat and ignition sources. Keep containers tightly closed

Safety & Handling

PPE: Gloves, safety goggles, well-ventilated area to minimize vapor inhalation

Hazards:

- Flammable solid
- Vapors may cause irritation to respiratory tract and eyes
- Camphor can be toxic in high doses