

Material Safety Data Sheet Camphene

Section 1: Chemical Product and Company Identification

Product Name : Camphene
Chemical Formula : C₁₀H₁₆
Company Identification : Tradeasia International Pte Ltd
Email : contact@chemtradeasia.com

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS#	% by Weight
Camphene	79-92-5	94 (min)

Section 3: Hazards Identification

Physical state: Solid

Appearance: White, translucent and waxy

Emergency overview: Warning! Flammable liquid and vapour. The toxicological properties of this material have not been fully investigated. May cause eye, skin and respiratory tract irritation.

Target organs: None.

Potential Health Effects:

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

Inhalation: May cause tract irritation. The toxicological properties of this substance have not been fully investigated. Vapours may cause dizziness or suffocation.

Section 4: First Aid Measures

Eye Contact:

Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin Contact:

Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Ingestion:

If victim is conscious and alert, give 2-4 cupful of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Section 5: Fire and Explosion Data

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH

(approved or equivalent), and full protective gear. Vapours may form an explosive mixture with air. Vapours can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Use water spray to keep fire-exposed containers cool. Containers may explode in the heat of a fire. Flammable liquid and vapour. Vapours may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

Use water spray to cool fire-exposed containers. Water may be ineffective. Do NOT use straight streams of water. For large fires, use water spray, fog or regular foam. For small fires, use dry chemical, carbon dioxide, water spray or regular foam.

Auto-ignition Temperature: Not available.

Flash Point: 36°C (96.80°F)

Explosion Limits: Lower: N/A

Explosion Limits: Upper: N/A

NFPA Rating: health: 0; flammability: 3; instability: 1;

Section 6: Accidental Release Measures

Personal precautions: Wear appropriate protective equipment and clothing during clean-up. Local authorities should be advised if significant spillages cannot be contained.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not contaminate water.

Methods for containment: Collect and dispose of spillage as indicated in Section 13 of the MSDS. Prevent entry into waterways, sewer, basements or confined areas.

Methods for cleaning up: Clean up spills immediately, observing precautions in the Protective Equipment section. Cover with sand, dry lime or soda ash and place in a closed container for disposal. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Stop leak only if you can do so without risk.

Other information: Clean up in accordance with all applicable regulations.

Section 7: Handling and Storage

Handling:

Wear safety glasses or goggles, rubber gloves and apron when handling material. If transferring to or from the container, use proper grounding procedures.

Storage:

Do not store in close proximity to excessive heat, open flames, strong acids or strong bases. To minimize product degradation, avoid prolonged exposure of the substance to air. Keep container tightly closed when not in use.

Ventilation:

Mechanical exhaust may be needed in confined and poorly ventilated areas.

Safety Stations:

An eyewash station and a safety shower should be readily available and clearly marked.

Section 8: Exposure Controls/Personal Protection

Engineering controls Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Personal protective equipment

Eye / face protection Wear safety glasses or goggles.

Skin protection A rubber apron is recommended when handling the material for extended periods of time.

Clothing Wear appropriate clothing to prevent skin exposure.

Respiratory protection A respirator is not normally required. If vapor concentration is suspected to be high, use a NIOSH approved organic vapor respirator

General hygiene considerations Wash hands and other exposed areas of skin with soap and water after handling the material.

Section 9: Physical and Chemical Properties

Appearance : White and translucent

Odor : Camphor-type

Physical state : Solid

Form : Crystalline and waxy

pH : Not determined

Melting Point : 111-115°F (44 - 46°C) (Thermal Analyzer)

Boiling point : 320°F (160°C) (Thermal Analyzer)

Flash point: 93°F (34°C) (Tag Closed Cup)

Flammability: Not determined.

Explosive Properties: Not an explosive.

Oxidizing Properties: Not Determined.

Vapour Pressure: ca. 3 mmHg @ 20°C

Solubility in Water (Weight %): Not determined

Solubility in Alcohol (Weight %): 100

Fat Solubility: NOT DETERMINED.

Partition Coefficient (n-Octanol/Water): Not determined

Viscosity: Not determined.

Vapour Density (air=1): CA.4.7

Evaporation Rate (Butyl Acetate=1): Not determined.

Auto-ignition Temperature: Not determined

Specific Gravity: 0.839 @ 60°C

Section 10: Stability and Reactivity Data

Chemical Stability : Substance is stable and unreactive under conditions of normal use.

Conditions to avoid : Prolonged or excessive heat and/or exposure to air may cause non-hazardous decomposition and/or oxidation of the substance.

Incompatible materials : Avoid contact with strong acids, bases and materials that react with unsaturated hydrocarbons.

Hazardous decomposition products : Carbon dioxide, carbon monoxide, acrid fumes.
Possibility of hazardous reactions : Hazardous polymerization does not occur.

Section 11: Toxicological Information

Primary Target Organs: Eyes

Primary Entry Route: Eyes.

Medical Conditions Aggravated by Overexposure: No known conditions.

Acute Toxicity:

Parameter Result

Acute Oral Toxicity: LD50 (Rat): > 5000 mg/kg

Acute Inhalation Toxicity: Not determined

Acute Dermal Toxicity: LD50 (rabbit): >2500 mg/kg

Eye Irritancy: Contact with the undiluted material is irritating to eyes.

Dermal Irritancy: Camphene applied full strength to intact or abraded rabbit skin for 24 hours under occlusion was slightly irritating. Closed patch test (48hrs, 4% in petrolatum): No irritation on human subjects. Irritating to skin.

Skin Sensitization: Maximization test (4% in petrolatum): No sensitization in 25 human subjects.

Mutagenicity: Not determined

Section 12: Ecological Information

Eco toxicity: Not determined.

Mobility: Not Determined.

Persistence and Degradability: Not determined.

Bioaccumulation Potential: Not determined.

Ozone Depleting Substances: None.

Section 13: Disposal Considerations

Disposal Methods: This material, if discarded, is considered a hazardous waste by EPA regulations 40 CFR 261.

Safe Handling of Wastes: Refer to Section 8 for information pertaining to personal protective equipment and exposure controls when handling this material for disposal.

Community Provisions: Dispose of this material at a local, state or federally approved landfill, incinerator or recovery facility.

Section 14: Transport Information

Label Codes: FLAMMABLE SOLID

DOT Proper Shipping Name (Bulk): UN1325, Flammable Solid, Organic, n.o.s.(Camphene), 4.1, PGII

DOT Proper Shipping Name (Non-Bulk): UN1325, Flammable Solid, Organic, n.o.s.(Camphene), 4.1, PGII

ERG: 133

Section 15: Other Regulatory Information

Chemical Inventories Status:

USA (TSCA): Compliant.

European Community (EINECS): Compliant.

Canada (DSL): Compliant.

Australia (AICS): Compliant.

Japan (IEC): Compliant.

Korea (KECI/ECL): Not Compliant

Philippines (PICCS): Compliant.

China (SEPA/CICS): Compliant.

USA: Federal:

SARA Title III Section 302/304: None.

SARA Title III Section 311/312: Yes

SARA Title III Section 313: None.

Hazardous Air Pollutants: None.

USA: States: None.

International: None

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Tradeasia International Pte. Ltd. Be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Tradeasia International Pte. Ltd. has been advised of the possibility of such damages.