133 Cecil Street # 12-03 Keck Seng Tower, Singapore 069535, Republic Of Singapore Tel. +65 6227 6365 - Fax. +65 6225 6286

www.tradeasia.com



Material Safety Data Sheet Turpentine Oil

Section 1: Chemical Product and Company Identification

Product Name : Turpentine Chemical Formula : Not available

Company Identification : Tradeasia International Pte Ltd Email : contact@chemtradeasia.com

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS#	% by Weight
Turpentine	8006-64-2	100

Toxicological Data on Ingredients: Turpentine: ORAL (LD50): Acute: 5760 mg/kg [Rat].

Section 3: Hazards Identification

Potential Acute Health Effects: Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of eye contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator).

Potential Chronic Health Effects: CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: DEVELOPMENTAL TOXICITY: Not available. The substance may be toxic to kidneys, lungs, bladder, gastrointestinal tract, upper respiratory tract, skin, eyes, Urinary System, central nervous system (CNS), ears, nose/sinuses. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 4: First Aid Measures

Eve Contact:

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

Skin Contact:

In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek medical attention.

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

Tel. +65 6227 6365 - Fax. +65 6225 6286

www.tradeasia.com



Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: Flammable.

Auto-Ignition Temperature: 253°C (487.4°F)

Flash Points: CLOSED CUP: 35°C (95°F). (TAG)

Flammable Limits: LOWER: 0.8%

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances: Flammable in presence of oxidizing materials.

Explosion Hazards in Presence of Various Substances:

Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive in presence of oxidizing materials.

Fire Fighting Media and Instructions:

Flammable liquid, insoluble in water. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

Special Remarks on Fire Hazards: Not available.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill: Absorb with an inert material and put the spilled material in an appropriate waste disposal. Large Spill:

Toxic flammable liquid, insoluble or very slightly soluble in water. Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not get water inside container. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on p. 3 disposal. Be careful that the product is not present at a concentration level above TLV. Check TLV on the MSDS and with local authorities.

Section 7: Handling and Storage

Precautions:

Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe gas/fumes/ vapor/spray. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents.

Storage:

Store in a segregated and approved area. Keep container in a cool, well-ventilated area. Keep container tightly closed and sealed until ready for use. Avoid all possible sources of ignition (spark or flame).

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

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

Republic Of Singapore

Tel. +65 6227 6365 - Fax. +65 6225 6286

www.tradeasia.com



Personal Protection: Splash goggles. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Vapor respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: TWA: 100 (ppm) from OSHA (PEL) [United States] TWA: 100 from ACGIH (TLV) [United States] [1999] TWA: 560 from ACGIH (TLV) [United States] TWA: 100 (ppm) [Australia] TWA: 150 (ppm) [United Kingdom (UK)] Consult local authorities for acceptable exposure limits.

Section 9: Physical and Chemical Properties

Physical state and appearance: Liquid.

Odor: Characteristic. Taste: Not available.

Molecular Weight: 136 g/mole

Color: Colorless.

pH (1% soln/water): Not applicable. **Boiling Point:** 165°C (329°F)

Melting Point: -55°C (-67°F)

Critical Temperature: Not available. Specific Gravity: 0.861 (Water = 1) Vapor Pressure: 76.9kPa (@ 20°C) Vapor Density: 4.69 (Air = 1)

Volatility: Not available.

Odor Threshold: 100 ppm

Water/Oil Dist. Coeff.: Not available. lonicity (in Water): Not available.

Dispersion Properties: Very slightly dispersed in methanol, diethyl ether, n-octanol. Is not dispersed in cold

water, hot water.

Solubility: Very slightly soluble in methanol, diethyl ether, n-octanol. Insoluble in cold water, hot water

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available. **Conditions of Instability:** Not available.

Incompatibility with various substances: Reactive with oxidizing agents.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Do not combine with Stannic Chloride, Chromyl Chloride, Acetone, Chlorine

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11: Toxicological Information

Routes of Entry: Absorbed through skin. Eye contact. Inhalation. Ingestion.

Toxicity to Animals:

WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 5760 mg/kg [Rat]. Acute toxicity of the vapor (LC50): 29000 1 hours [Mouse].

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

Republic Of Singapore

Tel. +65 6227 6365 - Fax. +65 6225 6286

www.tradeasia.com



Chronic Effects on Humans:

CARCINOGENIC EFFECTS: A4 (Not classifiable for human or animal.) by ACGIH. May cause damage to the following organs: kidneys, lungs, bladder, gastrointestinal tract, upper respiratory tract, skin, eyes, Urinary System, central nervous system (CNS), ears, nose/sinuses.

Other Toxic Effects on Humans:

Very hazardous in case of ingestion. Hazardous in case of skin contact (irritant), of inhalation. Slightly hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

Section 12: Ecological Information

Ecotoxicity: Not available. **BOD5 and COD:** Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely.

However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are more toxic.

Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification: CLASS 3: Flammable liquid. **Identification:** Turpentine UNNA: UN1299 PG: III **Special Provisions for Transport:** Marine Pollutant

Section 15: Other Regulatory Information

Federal and State Regulations:

Florida: Turpentine Minnesota: Turpentine Massachusetts RTK: Turpentine New Jersey: Turpentine TSCA 8(b) inventory: Turpentine

Other Regulations: OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada):

CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F). CLASS D-2B: Material causing other toxic effects (TOXIC).

DSCL (EEC):

R10- Flammable. R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.

HMIS (U.S.A.):

Health Hazard: 2 Fire Hazard: 3 Reactivity: 0

Personal Protection: h

National Fire Protection Association (U.S.A.):

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

Tel. +65 6227 6365 - Fax. +65 6225 6286

www.tradeasia.com



Health: 1

Flammability: 3
Reactivity: 0
Specific hazard:
Protective Equipment:

Gloves. Lab coat. Vapor respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Splash goggles.

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.