Material Safety Data Sheet

Crude Sulfate Turpentine

Section 1 - Chemical Product and Company Identification

Synonyms : Sulfate wood turpentine

Molecular Weight : -

Chemical Formula : Mixture

Company Identification : Tradeasia International Pte. Limited

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Section 2 - Composition and Information on Ingredients

Composition:

Chemical Name	CAS No	Content, %	Exposure limits, ppm
Turpentine and Terpene Hydrocarbon Isomers	8006-64-2	85-99	20
Methyl mercaptan	74-93-1	0.2-5	0.5
Dimethyl sulfide	75-18-3	1-12	10
Dimethyl disulfide	624-92-0	0-1.3	0.5

Section 3 – Hazards Identification

Primary Health Hazards: The primary health hazards are due to skin exposure to the liquid and/or inhalation of the vapor or mist.

Section 4 – First-Aid Measures

4.1. Description of first aid mesaures

Ingestion: Not applicable under normal use. If swallowed, can produce nausea, serious illness, and even death (average lethal dose for an adult is 4-6 ounces). DO NOT INDUCE VOMITING. Give edible oil or mineral oil to drink. Get immediate medical help.

Eye Contact: Liquid turpentine may cause irritation, conjunctivitis, or corneal burns. Vapors are irritating at 175 ppm. Speed is essential. Immediately flush with running water for at least 15 minutes, including under eyelid. Get immediate medical help.

Skin Contact: May cause irritation, dermatitis, or chemical burns. Remove contaminated clothing, footwear, and accessories such as a watch. Wash clothing before reuse and discard footwear which cannot be decontaminated. Immediately wash with warm running water and soap. Get medical help.

Skin Absorption: Liquid can penetrate skin to produce systemic effects. Wash thoroughly with soap and water and rinse.

Inhalation: May cause headache, dizziness, chest pain, bronchitis, pulmonary edema, cyanosis, narcosis, and rapid heart rate. Remove from exposure. Get medical help if symptoms persist or for excessive exposure.

Section 5 – Fire Fighting Measures

Flash Point: 23° to 35°C.**CAUTION:** The flash point of crude sulfate turpentine may be dependent on the concentration and type of sulfur compounds present.

Flammable Limits: LFL = 0.8% by volume UFL = no known data available

Extinguishing Media: Foam, carbon dioxide, or dry chemical. If water must be used, use as a mist or fog only.

Autoignition Temperature: 253°C

Special Firefighting Procedures: Water may be ineffective in quenching fire, but can be used to cool fire-exposed containers and surroundings. Toxic gases may be released during fire. Use SCBA and full protective clothing.

Unusual Fire and Explosion Hazards: May be ignited by heat, sparks, flame or static electricity. Forms explosive vapor/air mixtures.

Section 6 – Accidental Release Measures

Steps to be Taken In Case Material Is Released or Spilled: Immediately notify safety and environmental personnel. Provide adequate explosion-proof ventilation to remove vapors from spill area. Personnel involved in cleanup should use protection against breathing vapors or contact with liquid. Spills should be contained, picked up with absorbent material, and placed in a closed metal container for prompt disposal.

Other Precautions: Avoid inhalation of vapors or mist. Avoid contact with skin and eyes. Do not smoke in areas of storage or use.

Section 7 – Handling and Storage

Precautions to be Taken In Handling and Storage: Store in a well-ventilated, cool place away from sources of heat and ignition. Store away from oxidizing agents. Protect containers against physical damage.

Section 8 – Exposure Controls/Personal Protection

Respiratory protection: Suitable respiratory equipment with an organic vapor chemical cartridge is recommended

Hand protection: Protective gloves as nitrile are recommended Eye protection: Safety goggles or full-face mask are recommended

Skin and body protection: Apron, boots, face shield, or rubber suit, chemical-cartridge respirator or air-supplied or self-contained respirator recommended for non-routine or emergency exposures above the allowable exposure limits

Work: Eyewash stations and safety showers should be readily accessible. Provide local exhaust as needed so that exposure limits are met. Provide general ventilation in processing and storage areas so that exposure limits are met.

Self-contained breathing apparatus (SCBA) recommended when fighting fire.

Section 9 – Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Physical Description: Clear to dark brown liquid with a foul odor. Boiling Point (760 mm Hg): 119° – 173°C

Freezing Point: -50° to -60°C

Melting Point: -50° to -60°C

Molecular Formula: Mixture

Molecular Weight: Mixture

Solubility in Water (% by weight): 0.023% at 25oC Specific Gravity (H2O = 1): 0.87 at 15oC

Vapor Density (air = 1; 1 atm): 4.8

Vapor Pressure (mm Hg): 5 at 25oC

% Volatile by Volume [21oC]: 98

Section 10 – Stability and Reactivity

Chemical stability: Product is chemically stable

Conditions to Avoid: This material is reasonably stable when stored in a well-ventilated, cool place in a suitable container sealed to exclude air. It can undergo auto-oxidation in air, liberating heat which can build up in a confined space.

Incompatibility (Materials to Avoid): Oxidizing agents, oxidation catalysts, and sources of ignition and heat.

Hazardous Decomposition or By-Products: Methyl mercaptan, Dimethyl sulfide

Hazardous Polymerization: Will not occur.

Sensitivity to Static Discharge: Crude sulfate turpentine is a flammable liquid which may be ignited or explode as the result of a static electricity discharge.

Section 11 – Toxicological Information

Toxicity Data: Individual component information listed below.

Components:

Turpentine: TCLo (inhalation, human) = 175 ppm. LD50 (ingestion, rat) = 5,760 mg/kg. LC50 (inhalation, rat) = 12 gm/m3/6H. LC50 (inhalation, mouse) = 29 gm/m3/2H.

Dimethyl disulfide: LC50 (rat, inhalation) = 805 ppm/4 hours. LC50 (rat, inhalation) = 15.85 mg/m3/2 hours. LC50 (mouse, inhalation) = 12.3 mg/m3/2 hours. Subchronic (rat, inhalation): 100 ppm/6 hours/day/5 days/week/4 weeks resulted in no toxicity.

Dimethyl sulfide: LD50 (ingestion, rat) = 3300 mg/kg. LD50 (ingestion, mouse) = 3700 mg/kg. LC50 (inhalation, rat) = 40,250 ppm/4H.

Methyl mercaptan: LC50 (rat, inhalation) = 675ppm/4 hr; LC50 (mouse, inhalation) = 6530 ug/m3/2 hr

Target Organs: Respiratory system, eyes, skin and central nervous system.

Section 12 – Ecological Information

It is necessary to avoid contact of substance with drinking sources.

The product possesses toxic action on fishes and water micro flora of natural reservoirs.

Section 13 – Disposal Considerations

Methods of disposal: Incineration is recommended for waste disposal, using an approved incineration process for appreciable amounts in accordance with federal, state, and local regulations.

Do not incinerate sealed containers.

Section 14 – Transport Information

Classification:

UN Number: 1993

Packing group: III

ADR/RID: UN 1993, Flammable liquid, n.o.s. (Crude sulfate turpentine, contains alpha-Pinene) 3, III

Product should be transported in polyethylene, polypropylene, aluminum or stainless steel containers

Section 15 – Other Regulatory Information

EU Classification: F+, Extremely Flammable R12

Content: Crude sulfate turpentine, contains alpha-Pinene.

Symbol:

Risk Phrases:

12 Extremely flammable

28 Very toxic if swallowed

36 Irritating to eyes

37 Irritating to respiratory system

38 Irritating to skin

43 May cause sensitization by skin contact

Safety-phrases:

15 Keep away from heat

16 Keep away from sources of ignition

23 Do not breathe vapour

24 Avoid contact with skin

25 Avoid contact with eyes

36 Wear suitable protective clothing

37 Wear suitable gloves

38 In case of insufficient ventilation, wear suitable respiratory equipment.

39 Wear eye / face protection

51 Use only in well ventilated areas

Section 16 - Additional Information

References: Not available.

Other Special Considerations: Not available.

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