

CHEM INTERNATIONAL

MATERIAL SAFETY DATA SHEET

EMERGENCY #: CANUTEC (613) 996-6666

PRODUCT IDENTIFICATION AND PREPARATION INFORMATION

PRODUCT NAME: C.I. O.T.R.

EFFECTIVE DATE: January 8, 2009

WHMIS CLASS: B-3, D-2B

T.D.G. CLASSIFICATION: Flammable Liquid. Not regulated under the Transportation of Dangerous Goods Act when transported by road or rail in packaging or containers of 454 L or less (waste excluded).

SHIPPING NAME: Terpene hydrocarbons, n.o.s. (D'limonene)

UN: 2319

CLASS: 3

PG: III

MATERIAL USE: Organic Tar Remover

HAZARDOUS INGREDIENTS

INGREDIENTS	CAS #	Wt%	TLV	LD50	LC50
D'Limonene	005989-27-5	99-100	n/av	Oral - Acute: 4400 mg/kg - Rat 5600 mg/kg - Mouse Dermal - Acute: 5000 mg/kg - Rabbit	

PHYSICAL DATA

BOILING POINT (°C): n/av

COEF. OF WATER/OIL DIST.: n/av

VAPOUR PRESSURE: 0.2 kPa @ 20°C

SPECIFIC GRAVITY (H₂O=1): 0.838 - 0.843

VAPOUR DENSITY (Air=1): n/av

PERCENT VOLATILE (by vol.): n/av

SOLUBILITY IN WATER: Insoluble in cold water, hot water

EVAPORATION RATE (H₂O=1): n/av

PHYSICAL STATE: liquid

ODOUR THRESHOLD: n/av

APPEARANCE AND ODOUR: Orange liquid, smells like lemon

FIRE AND EXPLOSION DATA

FLAMMABILITY: Flammable

FLASH POINT (closed cup): 43.3°C

UEL: n/av

LEL: n/av

HAZARDOUS COMBUSTION PRODUCTS: These products are carbon dioxide (CO, CO₂), smoke and unidentified organic compounds

MEANS OF EXTINCTION: Flammable liquid, insoluble in water. For small fire use dry chemical powder. For large fire use water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, auto ignition or explosion.

SPECIAL FIRE HAZARDS: Flammable in presence of open flames and sparks, of heat. Fire fighters should wear positive pressure self-contained breathing apparatus.

AUTO IGNITION TEMP: n/av

EXPLOSION DATA-SENSITIVITY TO MECHANICAL IMPACT: n/av

STATIC DISCHARGE: n/av

REACTIVITY DATA

CONDITIONS FOR CHEMICAL INSTABILITY: The product is stable. Avoid hot work and sources of ignition on or near empty containers.

INCOMPATIBILITY: Reactive with oxidizing agents.

REACTIVITY: Not pyrophoric nor reactive with water. Does not undergo explosive decomposition, is stable to shock and is not an oxidizing agent. Hazardous Polymerization will not occur

FIRST AID

EYE: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention.

SKIN: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

INHALATION: If inhaled, removed to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately

INGESTION: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY: Eyes contact (X), Skin contact (X), Skin absorption (), Inhalation (X), Ingestion (X)

EFFECTS OF ACUTE EXPOSURE:

EYE: Hazardous in case of eye contact (irritant)

SKIN: Hazardous in case of skin contact (irritant)

INHALATION: Very hazardous in case of inhalation.

INGESTION: Very hazardous in case of ingestion.

Severe over exposure can result in death

EFFECTS OF CHRONIC EXPOSURE:

IRRITANCY: The substance may be toxic to lungs.

CARCINOGENICITY: 3 (Not classifiable for human.) by IARC

REPRODUCTIVE TOXIN: n/av

TERATOGENICITY: n/av

MUTAGENICITY: n/av

EXPOSURE LIMITS: Repeated or prolonged exposure to the substance can produce target organs damage. Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or many human organs.

PREVENTATIVE MEASURES

HAND PROTECTION: Gloves (impervious). (oil/solvent resistant)

EYE PROTECTION: Splash goggles recommended

RESPIRATORY PROTECTION: Vapor respirator. Organic Vapor Type. Be sure to use a MSHA/NIOSH approved respirator or equivalent.

BODY PROTECTION: Lab coat

FOOT 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 workstation location.

LEAK AND SPILL PROCEDURE: For small spill, recover the spilled liquid with pump or absorb with an inert material and put the spilled material in an appropriate waste disposal. For large spill, eliminate all sources of ignition. Stop leak if without risk. Prevent entry into sewers, basements or confined areas; dike if needed. Ventilate area. Recover the spilled liquid with pump or absorb with inert material and put the spilled material in an appropriate waste disposal.

WASTE DISPOSAL: Disposal by incineration is recommended. Review federal, provincial and local government requirements prior to disposal.

STORAGE REQUIREMENTS: 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)

HANDLING PROCEDURES: 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.

HMIS HAZARD RATING INFORMATION

FIRE

REACTIVITY

HEALTH

0 – Minimal, 1- Slight, 2 – Moderate, 3 – Serious, 4 – Extreme.

DISCLAIMER: Information for this material safety data sheet was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases, data is not available and is so stated. Since conditions of actual product use are beyond the control of the supplier, it is assumed that the user of this material has been fully trained according to the mandatory requirements of WHIMIS. No warranty, expressed or implied is made, and supplier will not be liable for any losses, injuries, or consequential damage that may result from the use or reliance on any information contained in this form.

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