

CHEM INTERNATIONAL

MATERIAL SAFETY DATA SHEET

EMERGENCY #: CANUTEC (613) 996-6666

PRODUCT IDENTIFICATION AND PREPARATION INFORMATION

PRODUCT NAME: C.I. Thermachem

EFFECTIVE DATE: January 15, 2009

WHMIS CLASS: DIA.E.

T.D.G. CLASSIFICATION: Sulphuric Acid, 8 (9.2) LTD QTY UN: 1830 PG: II

MATERIAL USE: Drain opener

HAZARDOUS INGREDIENTS

INGREDIENTS	CAS #	Wt%	TLV	LD50	LC50
Commercial Sulphuric Acid	7664-93-9	95	n/av	2140 mg/kg oral rat	

PHYSICAL DATA

BOILING POINT: 276°C

COEF. OF WATER/OIL DIST.: N/AV

VAPOUR PRESSURE (mm Hg): 0.0016 @ 40°C

SPECIFIC GRAVITY (H₂O=1): 1.84 @ 15.5°C

VAPOUR DENSITY (Air=1): N/AV

VOLATILE (by vol.): <1.0

SOLUBILITY IN WATER: Completely

EVAPORATION RATE (H₂O=1): N/AV

PHYSICAL STATE: Liquid

ODOUR THRESHOLD: N/AV

PH: .3

FREEZING POINT (°C): ~1.1°C

APPEARANCE AND ODOUR: Red, odourless liquid

DENSITY (G/ML): 1.84

FIRE AND EXPLOSION DATA

FLAMMABILITY: Not flammable. Extremely hazardous when in contact with many materials particularly carbides, chlorates, fulminates, nitrates, picrates, powdered metals, hydrogen. Hydrogen gas can accumulate to explosive concentrations inside confined spaces.

FLASH POINT: N/AP

HAZARDOUS COMBUSTION PRODUCTS: SO₂, H₂SO₃.

MEANS OF EXTINCTION: N/AP

SPECIAL PROCEDURES: Wear positive pressure self-contained breathing apparatus.

AUTO IGNITION TEMP: N/AP

REACTIVITY DATA

CHEMICAL STABILITY: No

INCOMPATIBILITY: Contact of acid with metals may form flammable hydrogen gas.

HAZARDOUS DECOMPOSITION PRODUCTS: SO₂, H₂SO₃.

REACTIVITY: Contact of acid with organic materials (such as chlorates carbides, fulminates and picrates) may cause fire, and explosion.

FIRST AID

EYE: Immediately flush eyes with running water for a minimum of 20 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY. Do not transport victim unless the recommended flushing period is completed or flushing can be continued during transport.

SKIN: Flush skin with running water for a minimum of 20 minutes. Start flushing, while removing contaminated clothing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY. Do not transport victim unless the recommended flushing period is completed or flushing can be continued during transport.

INHALATION: Move victim to fresh air, Give artificial respiration ONLY if breathing has stopped. Give Cardiopulmonary Resuscitation (CPR) if there is no breathing AND no pulse. Obtain medical attention IMMEDIATELY.

INGESTION: If victim is alert and not convulsing, rinse out mouth and give ½ to 1 glass of water to dilute material. DO NOT induce vomiting. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of, vomitus, rinse mouth and administer more water. IMMEDIATELY transport victim to an emergency facility.

TOXICOLOGICAL PROPERTIES

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

EFFECTS OF ACUTE EXPOSURE:

EYE: Immediate pain, severe burns and permanent corneal damage which may result in blindness. Corrosive effects on the skin and eyes may be delayed, and damaged may occur without the sensation or onset of pain. Strict adherence to first aid measures following any exposures is essential.

SKIN: Concentrate solution may cause pain and severe burns to the skin and brownish or yellow stains. Prolonged and repeated exposure to dilute solutions may cause irritation, redness, pain and drying and cracking of the skin.

INHALATION: Mists and vapors may cause irritation of the eyes, nose and respiratory tract. May cause increased pulmonary resistance, transient cough and bronchospasm. Severe overexposure may result in lung collapse and pulmonary edema, which can be fatal. Prolonged or repeated exposure may result in impaired lung function and possible discoloration and erosion of teeth.

INGESTION: Severe burning and pain in the mouth, throat and abdomen. Vomiting, diarrhea and perforation of the esophagus and stomach lining may occur.

EFFECTS OF CHRONIC EXPOSURE:

IRRITANCY: N/AV

SENSITIZATION: N/AV

CARCINOGENICITY: N/AV

REPRODUCTIVE TOXIN: N/AV

TERATOGENICITY: N/AV

MUTAGENICITY: N/AV

SYNERGISTIC MATERIALS: N/AV

EXPOSURE LIMITS: N/AV

PREVENTATIVE MEASURES

HAND PROTECTION: Impervious (i.e. neoprene or PVC) gloves

EYE PROTECTION: Tight-fitting chemical goggles and face shield.

RESPIRATORY PROTECTION: An approved air-purifying, respirator.

BODY PROTECTION: Impervious (i.e. neoprene, PVC) coveralls, acid resistant aprons or suits

FOOT PROTECTION: Impervious (i.e. neoprene, PVC) boots

ENGINEERING CONTROLS: Safety showers and eyewash fountains should be installed in storage and handling areas. Adequate ventilation to maintain vapours below exposure guidelines.

LEAK AND SPILL PROCEDURE: Remove all ignition sources. Ventilate area. Stop or reduce leak if safe to do so. Dike with inert material (sand, earth, etc). Collect into containers for reclaim or disposal. Use lime, limestone, sodium carbonate (soda ash), sodium bicarbonate, dilute sodium hydroxide, dilute aqua ammonia to neutralize.

WASTE DISPOSAL: Review federal, provincial and local government requirements prior to disposal of sulphuric acid.

STORAGE REQUIREMENTS: Store in cool, well ventilated area.

HANDLING PROCEDURES:

N/AP= NOT APPLICABLE · N/E=NOT ESTABLISHED · N/D=NOT DETERMINED · N/AV=NOT AVAILABLE
<=LESS THAN · >=MORE THAN

HMIS HAZARD RATING INFORMATION

FIRE

REACTIVITY

HEALTH

PERSONAL PROTECTION

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.

CHEM INTERNATIONAL

18043 – 107 Avenue
Edmonton, Alberta
T5S 1K3
1-800-665-7287