


SAFETY DATA SHEET (SDS)

Section 1. Identification

Product identifier	CHEM 1000 PART B
Other means of identification	CHEM 1000 B
Recommended use and restrictions on use	Floor Coating
Initial supplier identifier	CHEMTEC; 4117 Industriel; Laval; Québec; Canada; H7L 6B9 info@epoxychemtec.com T 450-629-1717
Emergency telephone number/restriction on use	Canada – CANUTEC 24-hour number 613-996-6666

Section 2. Hazard identification

Classification of hazardous product (name of the category or subcategory of the hazard class)	
Flammable liquids (Category 4) Sensitization of the skin (Category 1) Eye damage/irritation (Category 2A) Acute toxicity, Inhalation (Category 4) Specific target organ toxicity, single exposure; (Category 3)	
Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)	
 <p>Danger</p> <p>H227 Combustible liquid H317 May cause an allergic skin reaction H319 Causes serious eye irritation. H332 Harmful if inhaled H335 May cause respiratory irritation</p> <p>P210 Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking. P261 Avoid breathing dust/fume /gas/mist /vapours/spray. P264 Wash hands/nails/face/eyes thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear protective gloves/protective clothing/eye protection/face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of water and soap. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P312 Call a POISON CENTER/doctor if you feel unwell. P321 Specific treatment see part 4. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse. P370+P378 In case of fire: use chemical powder, alcohol-resistant, foam, CO2 mist or water to extinguish. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up. P501 Dispose of contents/container into safe container in accordance with local, regional, or national regulations.</p>	
Other hazards known	None

Section 3. Composition/information on ingredients

Chemical name (common name/synonyms)	CAS number or other	Concentration (%)
Homopolymer of HDI	28182-81-2	45-70
Hexamethylene -1,6- diisocyanate	822-06-0	0.1-1
Dipropylene glycol dimethyl ether	111109-77-4	15-40

* Statement - This safety data sheet provides concentration range(s) instead of the actual concentration(s) by weight (except for gases/propellants by volume) considered trade secret(s).

Section 4. First-aid measures

Inhalation	IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur.
Ingestion	IF SWALLOWED: Do not induce vomiting. If ingestion is suspected, contact physician or poison control center immediately. Rinse mouth with water. Never give anything by mouth to an unconscious person.
Skin contact	IF ON SKIN: Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
Eye contact	IF IN EYES: In case of contact, immediately flush eyes, keeping eyelids open, with plenty of water for at least 15 minutes. Do not rub affected area. Obtain medical attention. Remove contact lenses, if present and easy to do. Continue rinsing.

Most important symptoms and effects (acute or delayed)

Acute: Isocyanate vapors or mist at concentrations above the exposure limits or guidelines can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) with symptoms of runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing difficulty). Persons with a pre-existing, nonspecific bronchial hyperreactivity can respond to concentrations below the exposure limits or guidelines with similar symptoms as well as asthma attack or asthma-like symptoms. Exposure well above the exposure limits or guidelines may lead to bronchitis, bronchial spasm, and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g., fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible.

Additional information:

Do not leave the victim unattended. No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it or wear glove

Section 5. Fire-fighting measures

Specific hazards of the hazardous product (hazardous combustion products)

By thermal decomposition or combustion, emit: Oxides of carbon (CO, CO₂). Nitrogen oxides (NO_x). Black smoke. Hydrogen cyanide. Isocyanates. Isocyanic acid.

Suitable and unsuitable extinguishing media

Water spray, carbon dioxide, Alcohol resistant foam or dry chemical.
Do not use full water jet.

Special protective equipment and precautions for fire-fighters

Wear self-contained positive pressure breathing apparatus (MSHA/NIOSH approved or equivalent) and full protective gear. Keep containers cool by spraying with water if exposed to fire.

Section 6. Accidental release measures

Leak/spill: Evacuate all non-essential personnel. Ventilate. Eliminate all sources of ignition. Avoid all personal contact. Wear proper protective equipment. Dike area to prevent spreading. Prevent runoff into drains, sewers, and other waterways. Inform responsible authorities in case of accidental release. Do not allow product to reach sewage system of any water course. Shovel or pump to properly identified drum or salvage tank. Absorb residual material with sand or other absorbent material. Spilled material and water rinses are classified as chemical waste and must be disposed of in accordance with current local, provincial, and federal regulations.

Section 7. Handling and storage

Precautions for safe handling

Do not breathe vapors, mists, or dusts. Avoid release to the environment. Avoid skin and eye contact. Avoid prolonged or repeated exposure. Wear appropriate protective equipment when handling this material. Avoid eating and drinking while using this product. Employees should wash hands and face before eating or drinking. Use adequate ventilation. Handle and open container with care. Keep ignition sources away - Do not smoke. Protect from heat

Conditions for safe storage, including any incompatibilities

Store in a cool, dry, and well-ventilated area. Keep container tightly closed. Do not store above 50 °C. Store separate from food products. Protect from water and moisture.

Section 8. Exposure controls/Personal protection

Control parameters (biological limit values or exposure limit values and source of those values)

Exposure limits: CAS 28182-81-2 ACGIH – TLV-TWA 0.5mg/m³; OSHA PEL -STEL 1.0mg/m³(15min) CAS 822-06-0 ACGIH – TLV-TWA 0.005 ppm; CAS 111109-77-4 ACGIH – TLV-TWA 20ppm

Individual protection measures/personal protective equipment

Protective Equipment

Eye/type: Tightly sealed goggles.

Respiratory/type: Full Face Mask with organic vapor cartridge, Type A filter (BP >65°C).

Gloves/type: Chemical resistant gloves. Suitable gloves: Nitrile, neoprene, butyl rubber or natural rubber.

Clothing/type: Lab coat.

Footwear/type: Safety boots per local regulations.

Other/type: Eye wash fountain and safety shower should be in proximity. Employees should wash their hands and face before eating, drinking, or using tobacco products.

Ventilation requirements: Local exhaust at point of emission.

Section 9. Physical and chemical properties

Appearance, physical state/colour	Liquid clear	Vapour pressure	Not available
Odour	Slight odour to odourless	Vapour density	Not available
Odour threshold	Not available	Relative density	1.05-1.1 (20°C)
pH	Not available	Solubility	Insoluble. Reacts slowly with water to liberate CO ₂ gas.
Melting/freezing point	Not available	Partition coefficient - n-octanol/water	Not available
Initial boiling point/range	Not available	Auto-ignition temperature	Not available
Flash point	> 63°C	Decomposition temperature	Not available
Evaporation rate	Not available	Viscosity	30-60mPas(20°C)
Flammability (solids and gases)	Not available	VOC	Not available
Upper and lower flammability/explosive limits	Not available	Other	None known

Section 10. Stability and reactivity

Reactivity

Contact with moisture, other materials that react with isocyanates, or temperatures above 350 F (177 C), may cause polymerization.

Chemical stability

Stable at normal temperatures and pressures

Possibility of hazardous reactions

Hazardous polymerization may occur.

Conditions to avoid (static discharge, shock or vibration)

Avoid heat, flames, sparks, and other sources of ignition. Moisture.

Incompatible materials	
Water. Amines. Strong bases. Alcohols. Copper alloys.	
Hazardous decomposition products	
By thermal decomposition. Carbon oxides (CO, CO ₂). Nitrogen oxides (NO _x). Dense black smoke. Hydrogen cyanide. Isocyanates. Isocyanic acid. Hydrogen chloride. Hydrogen fluoride.	
Section 11. Toxicological information	
Information on the likely routes of exposure (inhalation, ingestion, skin, and eye contact)	
Skin contact. Eye contact. Inhalation	
Delayed and immediate effects (chronic effects from short-term and long-term exposure)	
<p>Effect of acute exposure: May cause an allergic skin reaction. Harmful if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness.</p> <p>Effects of chronic exposure: Not classified.</p> <p>Acute oral toxicity: ATE (mixture): > 2000 mg/kg (rat).</p> <p>Acute dermal toxicity: ATE (mixture): > 2000 mg/kg (rabbit).</p> <p>Acute inhalation toxicity: ATE (mixture) = 2.65 mg/L. The test atmosphere generated in the animal study is not representative of workplace environments, how the substance is placed on the market, and how it can reasonably be expected to be used. Therefore, the test result cannot be directly applied for the purpose of assessing hazard. Based on expert judgment and the weight of the evidence, a modified classification for acute inhalation toxicity is justified.</p> <p>Carcinogenicity of product: Not classified.</p> <p>Mutagenicity: Not classified.</p> <p>Reproductive effects: Not classified.</p>	
Numerical measures of toxicity (ATE; LD₅₀ & LC₅₀)	
<p>CAS 28182-81-2 LD50 Oral - Rat > 2500 mg/kg LD50 Dermal > 2000 mg/kg(rat-rabbit) LC₅₀ Inhalation - Rat - 2mg/L (4h, vapour).</p> <p>CAS 111109-77-4 LD50 Oral - Rat 3300mg/kg LD50 Dermal > 2000 mg/kg(rat-rabbit) LC₅₀ Inhalation - Rat - > 5.25mg/L (4h, rat).</p> <p>CAS 822-06-0 LD50 Oral - Rat 746mg/kg LD50 Dermal > 7000 mg/kg(rat) LC₅₀ Inhalation - Rat 0.124mg/L (vapour ,4h, rat).</p>	
Section 12. Ecological information	
Ecotoxicity (aquatic and terrestrial information)	
<p>Not expected to be harmful to aquatic organisms.</p> <p>28182-81-2: LC₅₀ > 100 mg/l (Daniorerio (zebra fish), 96 h), EC₅₀ > 100 mg/l (Daphnia magna (Water flea), 48 h), ErC₅₀ =199 mg/l, (scenedesmus subspicatus, 72 h), EC₅₀ > 10,000 mg/l, (activated sludge, 3 h).</p> <p>822-06-0: LC₀ >= 82.8 mg/l (Danio rerio (zebra fish), 96 h), EC₀ >= 89.1 mg/l (Daphnia magna (Water flea), 48 h), ErC₅₀ > 77.4 mg/l, (Desmodesmus subspicatus (Green algae), 72 h), EC₅₀: 842 mg/l, (activated sludge, 3 h).</p> <p>Biodegradability: Not readily biodegradable.</p> <p>Bioaccumulation: Not available.</p> <p>Mobility in soil: Not available.</p> <p>Other adverse effects: No further relevant information available.</p>	
Section 13. Disposal considerations	
Information on safe handling for disposal/methods of disposal/contaminated packaging	
Dispose of as an industrial waste in a manner acceptable to good waste management practice and in accordance with applicable local, provincial, or federal regulations.	
Section 14. Transport information	
UN number; Proper shipping name; Class(es); Packing group (PG) of the TDG Regulations	
NOT REGULATED	
UN number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime)	
NOT REGULATED	
UN number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air)	
NOT REGULATED	
Special precautions (transport/conveyance)	None
Environmental hazards (IMDG or other)	None
Bulk transport (usually more than 450 L in capacity)	None
Section 15. Regulatory information	
<p>CEPA status: Ingredients of this mixture appears on DSL.</p> <p>Hazardous Products Regulations: This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and this document contains all the information required by the Hazardous Products Regulations.</p> <p>TSCA: Ingredients of this mixture appears on TSCA inventory.</p>	
Section 16. Other information	
Date of the latest revision of the safety data sheet	January 18, 2022, version 1
Corrections	Complete review
References	Safety Data Sheets from manufacturer/supplier & from Canadian Centre for Occupational Health and Safety, CCOHS.
Abbreviations	
ACGIH	American Conference of Governmental Industrial Hygienists
ATE	Acute toxicity estimate

CAS	Chemical Abstract Service
DSL	Domestic Substance List
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
LC	Lethal concentration
LD	Lethal Dosage
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program (U.S.A.)
OSHA	Occupational Safety and Health Administration (U.S.A.)
PEL	Permissible Exposure Limit
STEL	Short-term Exposure Limit
TDG	Transport of dangerous goods in Canada
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.