


SAFETY DATA SHEET (SDS)

Section 1. Identification		
Product identifier	CHEM 1000 PREMIUM PART B	
Other means of identification	CHEM 1000 PREMIUM 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)		
Sensitization of the skin (Category 1) Acute toxicity, Inhalation (Category 4) Specific target organ toxicity, single exposure; Respiratory system (Category 3)		
Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)		
 <p>Danger</p> <p>H317 May cause an allergic skin reaction H332 Harmful if inhaled H335 May cause respiratory irritation</p> <p>P261 Avoid breathing dust/fume/gas/mist/vapours/spray. 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. P302+P352 IF ON SKIN: Wash with plenty of water. P332+P313 If skin irritation occurs: Get medical advice/attention. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P363 Wash contaminated clothing before reuse. P314 Get medical advice/attention if you feel unwell. 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 hexamethylene diisocyanate	28182-81-2	> 95
Hexamethylene -1.6 Diisocyanate	822-06-0	< 0.25
* 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: Move to an area free from further exposure. Extreme asthmatic reactions that may occur in sensitized persons can be life threatening. Get medical attention immediately. Administer oxygen or artificial respiration as needed. Asthmatic symptoms may develop and may be immediate or delayed up to several hours.	
Ingestion	IF SWALLOWED: Immediately call a doctor. Do not induce vomiting. Wash mouth out with water. Never give anything by mouth to an unconscious person.	
Skin contact	IF ON SKIN: Take off contaminated clothing, wash immediately with soap and plenty of warm water for 15 minutes. If skin irritation occurs: Get medical attention. Discard or wash contaminated clothing before reuse. If symptoms persist, seek medical attention.	
Eye contact	IF IN EYES: Immediately flush eyes with plenty of water for at least 15 minutes. Use lukewarm water if possible. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Then remove contact lenses, if present and easy to do and continue eye irrigation for not less than 15 minutes. Rinsing. If eye irritation persists: Get medical attention.	
Most important symptoms and effects (acute or delayed)		
Causes skin and eye irritation. May cause an allergic skin reaction. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure		
Indication of immediate medical attention/special treatment.		
Eyes: Stain for evidence of corneal injury. If cornea is burned, instill antibiotic/steroid preparation as needed. Workplace vapors could produce reversible corneal epithelial edema impairing vision. Skin: This compound is a skin sensitizer. Treat symptomatically as for contact dermatitis or thermal burn. Ingestion: Treat symptomatically. There is not specific antidote. Induce vomiting is contraindicated because of the irritating nature of compound. Inhalation: Treatment is essentially symptomatic. An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate.		
Section 5. Fire-fighting measures		
Specific hazards of the hazardous product (hazardous combustion products)		
Carbon oxide (CO, CO ₂), oxides of nitrogen (NO _x), dense black smoke, hydrogen cyanide, isocyanate, isocyanic acid, other undetermined compounds.		
Suitable and unsuitable extinguishing media		

Use carbon dioxide (CO ₂), dry chemical, foam, water spray for large fires. Do not use high volume water jet.			
Special protective equipment and precautions for fire-fighters			
Firefighters should wear NFPA compliant structural firefighting protective equipment, including self contained breathing apparatus and NFPA compliant helmet, hood, boots and gloves as required. Avoid contact with product. Decontaminate equipment and protective clothing prior to reuse. During a fire, isocyanate vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Exposure to heated diisocyanate can be extremely dangerous. Irritating/toxic fumes may be generated.			
Section 6. Accidental release measures			
Personal precautions, protective equipment, and emergency procedures			
Evacuate non-emergency personnel. Isolate the area and prevent access. Control source of the leak. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment (See Section 8). Prevent the spill spread into drains, sewers, water supplies, or soil.			
Methods and materials for containment and cleaning up			
Avoid prolonged exposure. Spill should be contained with inert material and disposed into suitable retaining area. Small volumes of liquid may be contained or absorbed into an appropriate absorbent. Keep away from all watercourses. Do not flush down storm or sanitary sewer. Dispose of in accordance with local, provincial, and federal regulations.			
Section 7. Handling and storage			
Precautions for safe handling			
Do not/Avoid breathing dust/fume/gas/mist/vapors/spray. Wash hands/nails/face /eyes thoroughly after handling. Do not eat, drink, or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear gloves/protective clothing/gloves/eye protection/face protection. (In case of inadequate ventilation) wear respiratory protection.			
Conditions for safe storage, including any incompatibilities			
Store in a cool, well-ventilated area. Keep container closed when not in use. Do not handle or store near open flames, heat, or other sources of ignition. Store away from incompatible materials (Section 10). Inspect all incoming containers to make sure they are properly labelled and not damaged. Storage area should be clearly identified, clear of obstruction and accessible only to trained personnel. Inspect periodically for damage or leaks. Storage temperature: -34-50 °C (-29.2-122°F).			
Section 8. Exposure controls/Personal protection			
Control parameters (biological limit values or exposure limit values and source of those values)			
Exposure limits: ACGIH – TLV-TWA : CAS 28182-81-2 :0.5mg/m ³ CAS 822-06-0 :0.005mg/m ³			
Appropriate engineering controls			
Use product in well-ventilated areas. Do not spray the product. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits. Supply emergency safety/quick-drench shower, eyewash station and washing facilities available in work area and near handling area. Where such systems are not effective, wear suitable personal protection equipment which performs satisfactorily and meets recognized standards.			
Individual protection measures/personal protective equipment			
Skin protection: Gloves: Neoprene gloves or equivalent. Clothing: Shirts with long sleeves, long pants.			
Respiratory: Not required if working area is well ventilated. Use a NIOSH approved respirators if the exposure limits are unknown.			
Eye protection: Safety glasses, chemical resistant			
Special instructions for protection and hygiene: Wash hands/nails/face thoroughly after handling. Do not eat, drink, or smoke when using this product. Practice good personal hygiene after using this material. Remove and wash contaminated work clothing before re-use. Educate and train employees in the safe use and handling of this product. Follow all label instructions.			
Section 9. Physical and chemical properties			
Appearance, physical state/colour	Liquid colorless to light yellow	Vapour pressure	5.2X10 ⁻⁹ @68F(20C)mm Hg
Odour	Faint odor	Vapour density	Not available
Odour threshold	Not available	Relative density	Approx.1.16 (20°C)
pH	Not available	Solubility	Insoluble
Melting/freezing point	Not available	Partition coefficient - n-octanol/water	Not available
Initial boiling point/range	Not available	Auto-ignition temperature	445°C
Flash point	158°C	Decomposition temperature	Not available
Evaporation rate	Not available	Viscosity	1200mPas@(23°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			
Stable under normal conditions of use and storage.			
Chemical stability			
Contact with moisture, other materials that react with isocyanates, or temperatures above 177 °C may cause polymerization. Moisture (water and high humidity) or high heat more than 177 °C can cause pressure build-up with possible explosive rupture.			
Possibility of hazardous reactions			
Non under normal conditions of storage and use.			
Conditions to avoid (static discharge, shock, or vibration)			
Heat, flames, and sparks. Protect from freezing.			
Incompatible materials			
Water, amines, strong bases, alcohols, copper alloys.			

Hazardous decomposition products	
By fire and high heat: Carbon oxide (CO, CO ₂), oxides of nitrogen (NO _x), dense black smoke, hydrogen cyanide, isocyanate, isocyanic acid, other undetermined compounds	
Section 11. Toxicological information	
Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)	
Skin, eyes inhalation, ingestion.	
Symptoms related to the physical, chemical, and toxicological characteristics	
Causes skin and eye irritation. May cause an allergic skin reaction. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure	
Delayed and immediate effects (chronic effects from short-term and long-term exposure)	
Skin Sensitization – May cause allergic skin reaction. Skin disorders and allergies with symptoms of reddening, itching, swelling and rash. Respiratory Sensitization – Symptoms affecting the respiratory tract can also occur several hours after overexposure.; Germ Cell Mutagenicity – Animal genetic toxicity studies were negative (Salmonella typhimurium, Metabolic Activation: with/without); Carcinogenicity – No ingredient listed by IARC, ACGIH, NTP or OSHA. Reproductive Toxicity – Available data show no indications for reproductive toxicity. Specific Target Organ Toxicity – Single Exposure – No data available Specific Target Organ Toxicity – Repeated Exposure – 90d, Inhalative: NOAEL:3.3, (rat,6 hours a day,5 days a week). Irritation to lungs and nasal cavity. Aspiration Hazard – Based on physical properties, not likely to be an aspiration hazard. Health Hazards Not Otherwise Classified – No data available.	
Numerical measures of toxicity (ATE; LD₅₀ & LC₅₀)	
CAS 28182-81-2 LD50 Oral - Rat> 2500 mg/kg, LD50 Dermal – Rat> 2000 mg/kg, LC ₅₀ Inhalation - 0.39-0.543mg/L,dust/mist CAS 822-06-0 LD50 Oral – Rat 746mg/kg, LD50 Dermal – Rat> 7000 mg/kg,LC ₅₀ Inhalation - 0.124mg/L,4h, vapour.	
Section 12. Ecological information	
Ecotoxicity (aquatic and terrestrial information)	28182-81-2: LC50: >100mg/L (Danio rerio (zebra fish), 96h); EC50: >100mg/L (Daphnia magna (Water flea) 48h ErC50: >1000mg/L (Scenedesmus subspicatus,72h) E50: 3,828mg/L (activated sludge,3h) 822-06-0: LC50: >=82,8mg/L (Danio rerio (zebra fish), 96h); EC50: >=89.1mg/l (Daphnia magna (Water flea) 48h ErC50: >77.4mg/L (Scenedesmus subspicatus,72h) E50: 842mg/L (activated sludge,3h)
Persistence and degradability	Not readily biodegradable aerobic,1%, Exposure time:28d, i.e.,
Bioaccumulative potential	28182-81-2 : 3.2 BCF in aquatic organisms is not to be expected 367.7 BCF in aquatic organisms is not to be expected (studies of hydrolysis products) 822-06-0: 57.6 BCF in aquatic organisms is not to be expected 3.2 BCF in aquatic organisms is not to be expected (studies of hydrolysis products)
Mobility in soil	No data available
Other adverse effects	No data available
Section 13. Disposal considerations	
Information on safe handling for disposal/methods of disposal/contaminated packaging	
Dispose of contents/container into safe container in accordance with local, regional, or national 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)	Possible
Section 15. Regulatory information	
Safety/health Canadian regulations specifics	This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).
Environmental Canadian regulations specifics	Refer to Section 3 for ingredient(s) of the DSL
Safety/health/environmental outside regulations specifics	
United States OSHA information: This product is regulated according to OSHA (29 CFR). United States EPA (Environmental Protection Agency) information: 40 CFR Refer to the ingredients listed in Section 3 & Sections 12; 13 & 14. United States TCSA information: Refer to the ingredients listed in Section 3.	

Section 16. Other information

Date of the latest revision of the safety data sheet	January 25, 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.	