SAFETY DATA SHEET (SDS)

Section 1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>CHEM 1000, Part B (Top Coat Polycarbamide)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td>FF-LSEG1-B</td>
</tr>
<tr>
<td>Recommended use and restrictions on use</td>
<td>Floor Coating</td>
</tr>
<tr>
<td>Initial supplier identifier</td>
<td>Chemtec 913 Michelin Laval Québec (Canada)  H7L-5B6  450-629-1717</td>
</tr>
<tr>
<td>Emergency telephone number/restriction</td>
<td>Canada – CANUTEC Number 24 hours 613-996-6666</td>
</tr>
</tbody>
</table>

Section 2. Hazard Identification

Classification of hazardous product (name of the category or subcategory of the hazard class)

- Skin corrosion/irritation (Category 2)
- Serious eye damage/eye irritation (Category 2B)
- Skin sensitization (Category 1)
- Acute toxicity, Inhalation (Category 4)
- Sensitisation Respiratory (Category 1)
- Specific target organ toxicity, single exposure, Respiratory track irritation (STOT, SE) (Category 3)
- Specific target organ toxicity, repeated exposure (STOT, RE) (Category 2)

Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)

<table>
<thead>
<tr>
<th>Warning</th>
</tr>
</thead>
<tbody>
<tr>
<td>H315 + H320 Causes skin and eye irritation.</td>
</tr>
<tr>
<td>H317 May cause an allergic skin reaction.</td>
</tr>
<tr>
<td>H332 Harmful if inhaled</td>
</tr>
<tr>
<td>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled</td>
</tr>
<tr>
<td>H335 May cause respiratory irritation</td>
</tr>
<tr>
<td>H373 May cause damage to organs through prolonged or repeated exposure</td>
</tr>
</tbody>
</table>

Prevention

P260 + P261 Do not/Avoid breathing dust/fume/gas/mist/vapors/spray. P264 Wash hands/nails/face/eyes thoroughly after handling. P270 Do not eat, drink or smoke when using this product P271 Use only outdoors or in a well ventilated area P272 Contaminated work clothing should not be allowed out of the workplace. P280 Wear gloves/protective clothing/gloves/eye protection/face protection. P284 (In case of inadequate ventilation) wear respiratory protection.

Response

IF ON SKIN: P302 + P352 Wash with plenty of water. P332 + P313 If skin irritation occurs: get medical advice/attention P362 + P364 Take off contaminated clothing and wash it before reuse. IF INHALED: P304 + P340 Remove person to fresh air and keep comfortable for breathing. P312 Call a doctor if you feel unwell. P342 + P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor IF IN EYES: P305 + P351 + P338 Rinse cautiously with water. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical attention.

Storage

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal

P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.

Other hazards known |
None

Section 3. Composition/Information on Ingredients

<table>
<thead>
<tr>
<th>Chemical name (common name/synonyms)</th>
<th>CAS number or other</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,6-Hexamethylene Diisocyanate Based Polyisocyanate</td>
<td>28182-81-2</td>
<td>&lt; 90 %</td>
</tr>
<tr>
<td>Aliphatic diisocyanate</td>
<td>822-06-0</td>
<td>&lt; 0,5 %</td>
</tr>
<tr>
<td>Aliphatic polyisocyanate</td>
<td>-----</td>
<td>&lt; 20 %</td>
</tr>
</tbody>
</table>

Section 4. First-Aid Measures

<table>
<thead>
<tr>
<th>Inhalation</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF INHALED: If overexposure remove person to fresh air and keep comfortable for breathing. Administer oxygen or artificial respiration as needed. Asthmatic symptoms may develop and may be immediate or delayed up to several hours. Extreme asthmatic reactions can be life threatening. If symptoms persist, seek medical attention.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF SWALLOWED: Immediately call a doctor. Prevent aspiration of vomit. Do not give anything by mouth to an unconscious</td>
</tr>
</tbody>
</table>

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal

P501 Dispose of contents/container into safe container in accordance with local, regional or national regulations.

Other hazards known |
None
person. If symptoms persist, seek medical attention.

### Skin contact
IF ON SKIN: Immediately take off contaminated clothing and shoes, wash immediately with soap and plenty of water (20 - 30 minutes). Use lukewarm water if possible. If skin irritation occurs: Get medical attention. Wash clothing before reuse. If symptoms persist, seek medical attention. For sever exposures, immediately get under safety shower and begin rinsing.

### Eye contact
IF IN EYES, In case of contact, immediately rinse cautiously with water for several minutes (20 - 30 minutes). Use lukewarm water if possible. Remove contact lenses, if present and easy to do. Continue 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**
In all cases, call a doctor. Do not forget this document.

## Section 5. Fire-Fighting Measures

**Specific hazards of the hazardous product (hazardous combustion products)**
Carbon monoxide (CO), toxic fumes.

**Suitable and unsuitable extinguishing media**
In case of fire: Use carbon dioxide (CO₂), dry chemical.

**Special protective equipment and precautions for fire-fighters**
During a fire, irritating/toxic fumes may be generated. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment as required.

## 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. Do not touch or walk through spilled material.

**Methods and materials for containment and cleaning up**
Avoid prolonged exposure. Stop leak if you can do it without risk. Spill should be contained with inert material and disposed into suitable retaining area. Do not touch or walk through spilled material. 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. Take precautionary measures against static discharges. 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: 16 - 27 °C

## 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: 0.5 mg/m³; CAS 822-06-0: 0.02 mg/m³

**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**
Gloves: Neopren 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; Equipment: 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

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance, physical state/colour</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>Faint odor</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not available</td>
</tr>
<tr>
<td>pH</td>
<td>Not available</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>Not available</td>
</tr>
<tr>
<td>Initial boiling point/range</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not available</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not available</td>
</tr>
<tr>
<td>Solubility</td>
<td>Reacts</td>
</tr>
<tr>
<td>Partition coefficient - n-octanol/water</td>
<td>Not available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Not available</td>
</tr>
</tbody>
</table>
**Section 10. Stability and Reactivity**

**Reactivity**
Stable under normal conditions.

**Chemical stability**
Yes, Stable under the recommended storage and handling conditions prescribed.

**Possibility of hazardous reactions**
Non under normal conditions of storage and use.

**Conditions to avoid (static discharge, shock or vibration)**
Excess heat.

**Incompatible materials**
Acid, amine, humidity, alcohol, metal, oxidizing agents.

**Hazardous decomposition products**
Cyanate and isocyanate, acid, cyanogen, nitrile, hydrogen cyanide, carbon mono and dioxide.

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**Section 11. Toxicological Information**

**Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)**
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.

**Symptoms related to the physical, chemical and toxicological characteristics**
No specific information available.

**Delayed and immediate effects (chronic effects from short-term and long-term exposure)**
Skin Sensitization – May cause allergic skin reaction. Skin disorders and Allergies. Respiratory Sensitization – No data available;
Germ Cell Mutagenicity – No data available; Carcinogenicity – No ingredient listed by IARC, ACGIH, NTP or OSHA; Reproductive Toxicity – No data available;
Specific Target Organ Toxicity — Single Exposure – No data available; Specific Target Organ Toxicity — Repeated Exposure – No data available;
Aspiration Hazard – No data available; Health Hazards Not Otherwise Classified – No data available.

**Numerical measures of toxicity (ATE; LD50 & LC50)**
CAS 28182-81-2: Acute Oral Toxicity: LD50: > 5,000 mg/kg (rat) Estimated Value; Acute Inhalation Toxicity: LC50: 390 – 453 mg/m3, aerosol, 4 h (rat). LD50: 20.8 mg/m3, 3 h; Acute dermal toxicity: LD50: > 5,000 mg/kg (rabbit); ATE not available in this document.

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**Section 12. Ecological Information**

**Ecotoxicity (aquatic and terrestrial information):**
Acute and Prolonged Toxicity to Fish: CAS 28182-81-2; LC50: > 100 mg/L (Zebra fish (Brachydanio rerio) 96h);
Acute Toxicity to Aquatic Invertebrates: CAS 28182-81-2; EC50: > 100 mg/L (Water flea (Daphnia magna) 48 h);
Toxicity to Aquatic Plants: CAS 28182-81-2; EC50: > 1,000 mg/L (Green algae (Scenedesmus subspicatus) 72 h);
Toxicity to Microorganisms: CAS 28182-81-2; EC50: > 1,000 mg/L, (Activated sludge microorganism, 3 h).

**Persistence and degradability**
CAS 28182-81-2: 0%, Exposure time: 28 Days, Not readily biodegradable.

**Bioaccumulative potential**
No data available

**Mobility in soil**
No data available

**Other adverse effects**
No data available

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**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.

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**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

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**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

<table>
<thead>
<tr>
<th>Date of the latest revision of the safety data sheet</th>
<th>February 04, 2018 - version 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>References</td>
<td>Safety Data Sheets from manufacturer/supplier &amp; from Sigma-Aldrich.com &amp; Echa.europea.eu</td>
</tr>
</tbody>
</table>

### 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

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