SAFETY DATA SHEET (SDS)

Section 1. Identification

<table>
<thead>
<tr>
<th>Product identifier</th>
<th>CHEM 3000 FC , Part B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other means of identification</td>
<td>FF-IPU-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) 450-629-1717</td>
</tr>
<tr>
<td>Emergency telephone number/restriction on use</td>
<td>Canada – CANUTEC Number 24 hours 613-996-6666</td>
</tr>
</tbody>
</table>

Section 2. Hazard Identification

<table>
<thead>
<tr>
<th>Classification of hazardous product (name of the category or subcategory of the hazard class)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammable liquids (Category 3)</td>
</tr>
<tr>
<td>Aspiration hazard (Category 1)</td>
</tr>
<tr>
<td>Skin corrosion/irritation (Category 2)</td>
</tr>
<tr>
<td>Skin Sensitisation (Category 1)</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation (Category 2A)</td>
</tr>
<tr>
<td>Acute toxicity Inhalation (Category 2)</td>
</tr>
<tr>
<td>Sensitisation respiratory (Category 1)</td>
</tr>
<tr>
<td>Specific target organ toxicity, single exposure; respiratory tract irritation (Category 3)</td>
</tr>
<tr>
<td>Specific target organ toxicity, single exposure; narcotic effects (Category 3)</td>
</tr>
<tr>
<td>Germ cell mutagenicity (Category 1B)</td>
</tr>
<tr>
<td>Carcinogenicity (Category 1B)</td>
</tr>
<tr>
<td>Specific target organ toxicity, repeated exposure (Category 2)</td>
</tr>
</tbody>
</table>

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

**Warning**
- H226 Flammable liquid and vapor
- H304 May be fatal if swallowed and enters airway
- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H330 Fatal if inhaled
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
- H335 May cause respiratory irritation
- H336 May cause drowsiness or dizziness
- H340 May cause genetic effects
- H350 May cause cancer
- H373 May cause damage to organs through prolonged or repeated exposure

**Prevention**

**Response**
- IF SWALLOWED: P301 + P331 Do NOT induce vomiting. P310 Immediately call a POISON CENTER
- IF ON SKIN: P302 + P352 Wash with plenty of water. P332 + P313 If skin irritation occurs: Get medical advice/attention. P303+P361+P352 If on skin (or hair): take off immediately all contaminated clothing. Rinse skin with water (or shower). 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. P310 Immediately call a POISON CENTER/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.
- IF EXPOSED OR CONCERNED: P308 + P313 Get medical advice/attention.
- IN CASE OF FIRE: P370 + P378 Use manufacturer/supplier or the competent authority to specify appropriate media.

**Storage**
- P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P235 Keep cool P405 Stored locked up.
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>Polyphenylene isocyanate (MDI)</td>
<td>9016-87-9</td>
<td>30 - 60 %</td>
</tr>
<tr>
<td>Diphenylmethane diisocyanate (MDI)</td>
<td>26447-40-5</td>
<td>30 - 60 %</td>
</tr>
<tr>
<td>Light aromatic solvent naphtha</td>
<td>64742-95-6</td>
<td>20 - 40 %</td>
</tr>
</tbody>
</table>

Section 4. First-Aid Measures

**Inhalation**
IF INHALED: IF overexposure remove person to fresh air and keep comfortable for breathing. If symptoms persist, seek medical attention. Aspiration into lungs can produce severe lung damage. If not breathing, give artificial respiration or give oxygen by trained personnel. Use barrier to give mouth-to-mouth resuscitation.

**Ingestion**
IF SWALLOWED: CAN ENTER LUNGS AND CAUSE DAMAGE. Immediately call a doctor. Prevent aspiration of vomit. Rinse mouth thoroughly with water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Never give anything by mouth to an unconscious person.

**Skin contact**
IF ON SKIN: Remove contaminated clothing, wash immediately with soap and water (20 - 30 minutes). If skin irritation occurs: Get medical attention. Wash contaminated clothing before reuse.

**Eye contact**
IF IN EYES, Rinse cautiously with water for several minutes (20 - 30 minutes). Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. DO NOT attempt to manually remove anything stuck to eye(s).

**Most important symptoms and effects (acute or delayed)**
Causes serious eye irritation. Causes skin irritation. Fatal if inhaled. May cause an allergic skin reaction. May cause genetic effects. May cause cancer. May be fatal if swallowed and enters airway. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. 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. Exposure to isocyanates can cause difficulty breathing or asthmatic reaction.

Section 5. Fire-Fighting Measures

**Specific hazards of the hazardous product (hazardous combustion products)**
Toxic fumes.

**Suitable and unsuitable extinguishing media**
In case of fire: Use Carbon dioxide (CO₂), dry chemical, alcohol resistant foam, dry sand, water.

**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. Shield personnel to protect from venting, rupturing or bursting cans. Move containers from fire area if it can be done without risk.

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. Do not smoke, extinguish all ignition sources. 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. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. 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. Do not touch or walk through spilled material. 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**
Obtain special instruction before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof (electrical/ventilating/ lighting) equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe/avoid dust/fume/gas/mist/vapours/spry. Wash hands/nails/face/eyes thoroughly after handling. 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) wears 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
Section 8. Exposure Controls/Personal Protection

Control parameters (biological limit values or exposure limit values and source of those values)
Exposure limits: CAS 9016-87-9 ACGIH – TLV-TWA 0.005 ppm/ STEL 0.07 mg/m³; CAS 26447-40-5 ACGIH – TLV-TWA 0.02 ppm/ 0.005 ppm; CAS 64742-95-6 ACGIH – TLV-TWA Not available.

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>Appearance, physical state/colour</th>
<th>Vapour pressure</th>
<th>Odour</th>
<th>Vapour density</th>
<th>Odour threshold</th>
<th>pH</th>
<th>Solubility</th>
<th>Melting/freezing point</th>
<th>Partition coefficient - n-octanol/water</th>
<th>Initial boiling point/range</th>
<th>Auto-ignition temperature</th>
<th>Flash point</th>
<th>Decomposition temperature</th>
<th>Evaporation rate</th>
<th>Flammability (solids and gases)</th>
<th>Viscosity</th>
<th>Upper and lower flammability/explosive limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liquid</td>
<td>Not available</td>
<td>Aromatic</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>Liquid</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>Approx. 190 °C</td>
<td>Not available</td>
<td>Approx. 200°C</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
<td>Not available</td>
</tr>
</tbody>
</table>

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. Subject to static discharge hazards.

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

Incompatible materials
Water, amines, alcohols, oxidizing agents, acids, bases, metal, phenol, markaptants, urethanes.

Hazardous decomposition products
Carbon mono (CO) and dioxide (CO₂), nitrogen oxides, hydrogen cyanide, toxic fumes.

Section 10. Stability and Reactivity

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact)
Causes serious eye irritation. Causes skin irritation. Fatal if ingested. May cause an allergic skin reaction. May cause genetic effects. May cause cancer. May be fatal if swallowed and enters airway. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause respiratory irritation. May cause drowsiness or dizziness. May cause damage to organs through prolonged or repeated exposure.

Symptoms related to the physical, chemical and toxicological characteristics
Eye irritation - burning sensation, tearing, redness and swelling; Skin sensitization, resulting in dermatitis, may occur in some individuals; Ingestion, swallowing may result in irritation and corrosion of the mouth, throat and digestive tract Respiratory tract irritation.

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 – Not available; Carcinogenicity – No ingredient listed by IARC, ACGIH, NTP or OSHA. Although lifetime inhalation of PMDI aerosols by rats resulted in a small number of benign adenomas, they are considered to be of unlikely relevance to occupational exposures; Reproductive Toxicity – Not available; Specific Target Organ Toxicity – Single Exposure – Not available; Specific Target Organ Toxicity – Repeated Exposure – Not available; Aspiration Hazard – May cause respiratory sensitization.; CAS 64742-95-6 May be fatal if swallowed and enters airways; Health Hazards Not Otherwise Classified – No data available.

Numerical measures of toxicity (ATE; LD₅₀ & LC₅₀)
CAS: 9016-87-9 LD₅₀ Oral – Rat >10000 mg/kg; LD₅₀ Dermal – Rabbit - 6200 mg/kg; LC₅₀ Inhalation - Rat – 490 mg/m³ 4hrs; CAS 26447-40-5 LD₅₀ Oral - Rat - 2200 mg/kg; LD₅₀ Dermal – Rat > 10000 mg/kg; LC₅₀ Inhalation - Rat – 370 mg/m³ 4hrs ; CAS 64742-95-6 LD₅₀ Oral - Rat =
Section 12. Ecological Information

Ecotoxicity (aquatic and terrestrial information)

Toxicity to fish: CAS: 9016-87-9 LC₅₀: >1000 mg/l (Zebra fish); CAS 64742-95-6: LC₅₀: 9.22 mg/l (Oncorhynchus mykiss) 96h)

Toxicity to Aquatic Invertebrates: CAS: 9016-87-9: EC₅₀: >1,000 mg/l (Daphnia magna) 24h); CAS 64742-95-6: EC₅₀ = 6.14 mg/l (Daphnia magna) 48h)

Toxicity to Microorganisms: CAS: 9016-87-9 EC₅₀: >1,000 mg/l. (E, coli).

Persistence and degradability: Low biodegradability.

Bioaccumulative potential: No data available

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

NAME: Resin Solution, flammable; UN NUMBER: UN 1866; HAZARD CLASS: 3; PACKING GROUP: III.

UN number; Proper shipping name; Class(es); Packing group (PG) of the IMDG (maritime)

NAME: Resin Solution, flammable; UN NUMBER: UN 1866; HAZARD CLASS: 3; PACKING GROUP: III; MARINE POLLUTANT: No

UN number; Proper shipping name; Class(es); Packing group (PG) of the IATA (air)

NAME: Resin Solution, flammable; UN NUMBER: UN 1866; HAZARD CLASS: 3; PACKING GROUP: III

Special precautions (transport/conveyance)

Can be shipped as LIMITED QUANTITY according to TDG or NOT REGULATED (1.33).

Environmental hazards (IMDG or other)

None

Bulk transport (usually more than 450 L in capacity)

N/A according to Annex I or II of MARPOL 73/78 and the IBC or IGC Code

Section 15. Regulatory Information

Safety/health Canadian regulations specific

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR).

Environmental Canadian regulations specific

Refer to Section 3 for ingredient(s) of the DSL

Safety/health/environmental outside regulations specific

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

February 04, 2018 - version 1

References

Safety Data Sheets from manufacturer/supplier & from Sigma-Aldrich.com & Echa.europe.eu

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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