



A14 : Polyurethane prepolymer, diphenylmethane diisocyanate and dibutyltin dilaurate based product

Section 1. Identification		
Product identifier	INJECTEC-R	
Other means of identification	53.00	
Recommended use and restrictions on use	Expansive resin for crack repairation	
Initial supplier identifier	Les Produits Daubois Inc. 6155 boul. des Grandes-Prairies, St-Léonard (Québec) H1P 1A5 Tel. 514-328-1253	
Emergency telephone number/restriction on use	Canada – CANUTEC 613-996-6666	
Section 2. Hazard identification		
Classification of hazardous product (name of the category or subcategory of the hazard class)		
Skin irritation (Category 2) Skin sensitization (category 1) Eye irritation (Category 2A) Acute toxicity inhalation (Category 4) Respiratory sensitization (category 1) Specific target organ toxicity – single exposure (Category 3), Central nervous system Carcinogenicity (Category 2)		
Information elements (symbols, signal words, hazard statements and precautionary statements of the category/subcategory)		
<p>Danger</p> <p>H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H336 May cause drowsiness or dizziness. H351 Suspected of causing cancer.</p> <p>P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash hands/nails/face 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 gloves/protective clothing/eye protection/face protection. P284 Wear respiratory protection. P302 + P352 IF ON SKIN: wash with plenty of water. P332 + P313 IF SKIN irritation or rash occurs: Get medical attention. P362 + P364 Take off contaminated clothing and wash it before reuse. P304 + P340 IF INHALED: 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 doctor. P305 + P351 + P338 IF IN EYES, Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical attention. P308 + P313 IF exposed or concerned: Get medical attention. 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 (%)
Polyurethane Prepolymer	112898-48-3	50-60
2, 4-Diphenylmethane Diisocyanate (mdi)	5873-54-1	20-30
4, 4-Diphenylmethane Diisocyanate (mdi)	101-68-8	15-25
Dibutyltin Dilaurate	77-58-7	< 1
Section 4. First-aid measures		
Inhalation	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a doctor if you feel unwell. If experiencing respiratory symptoms: Call a doctor.	
Ingestion	IF SWALLOWED: Immediately call a doctor. DO NOT INDUCE VOMITING. NEVER give anything by mouth if victim is	



	rapidly losing consciousness, or is unconscious or convulsing. Rinse mouth thoroughly with water. Have victim drink two glasses of water. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration.
Skin contact	IF ON SKIN: wash with plenty of water. IF SKIN irritation or rash occurs: Get medical attention. Take off contaminated clothing and wash it before reuse.
Eye contact	IF IN EYES, Rinse cautiously with water for several minutes (15-20). 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 irritation. Causes serious eye irritation.
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 oxides and other irritant/toxic gases and fumes.

Suitable and unsuitable extinguishing media

In case of fire: Use carbon dioxide, chemical powder agent and appropriate foam to extinguish surrounding products.

Special protective equipment and precautions for fire-fighters

During a fire, irritating/toxic smoke and fumes may be generated. Do not enter fire area without proper protection. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece. Shield personnel to protect from venting, rupturing or bursting cans. Move containers from fire area if it can be done without risk. Water spray may be useful in cooling equipment and cans exposed to heat and flame.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only. All persons dealing with clean-up should wear the appropriate protective equipment (See Section 8).

Methods and materials for containment and cleaning up

Ventilate area of release. Stop the leak if it can be done safely. Contain and absorb any spilled liquid concentrate with inert absorbent material, then place material into a container for later disposal (see Section 13). Contaminated absorbent material may pose the same hazards as the spilled product. Notify the appropriate authorities as required.

Section 7. Handling and storage

Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Wash hands/nails/face 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/eye protection/face protection.

Before handling, it is very important that engineering controls are operating, and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Inspect containers for leaks before handling. Label containers appropriately. Ensure proper ventilation. Avoid breathing dust/fume/gas/mist/vapours/spray. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and flame. Avoid generating high concentrations of dusts, vapours or mists. Keep away from incompatible materials (Section 10). Keep containers closed when not in use. Empty containers are always dangerous. Refer also to Section 8.

Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store locked up. 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.

Section 8. Exposure controls/Personal protection

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

Exposure limits: CAS 101-68-8 ACGIH – TLV-TWA 0.005 ppm; CAS 77-58-7 ACGIH – TLV-TWA 0.1 mg/m³ (STEL 0.2 mg/m³);

Appropriate engineering controls

Use under well-ventilated conditions. Local exhaust ventilation system is recommended to maintain concentrations of contaminants below exposure limits. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Individual protection measures/personal protective equipment

Respiratory protection is required if the concentrations are higher than the exposure limits. Use a NIOSH approved respirators if the exposure limits are unknown. Chemically protective gloves (impervious), and other protective clothing to prevent prolonged or repeated skin contact, must be worn during all handling operations. Wear protective chemical splash goggles to prevent mists from entering the eyes. 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.

Section 9. Physical and chemical properties

Appearance, physical state/colour	Yellow liquid	Vapour pressure	Not available
Odour	Characteristic	Vapour density	Not available



Odour threshold	Not available	Relative density	1.12 @ 20°C
pH	Not available	Solubility	Not available
Melting/freezing point	Not available	Partition coefficient - n-octanol/water	Not available
Initial boiling point/range	230°C	Auto-ignition temperature	Not available
Flash point	> 200°C	Decomposition temperature	> 200°C polymerises
Evaporation rate	Not available	Viscosity	Not available
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

Does not react under the recommended storage and handling conditions prescribed.

Chemical stability

Stable under the recommended storage and handling conditions prescribed.

Possibility of hazardous reactions

None known

Conditions to avoid (static discharge, shock or vibration)

None known

Incompatible materials

Oxidizing materials; etc.

Hazardous decomposition products

None known

Section 11. Toxicological information

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

Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Harmful if inhaled. May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause drowsiness or dizziness. Suspected of causing cancer.

Symptoms related to the physical, chemical and toxicological characteristics

Skin irritation, redness, stinging, pain; Eye irritation, redness, tearing; Respiratory tract irritation, coughing, shortness of breath, dizziness, drowsiness, nausea and headaches.

Delayed and immediate effects (chronic effects from short-term and long-term exposure)

Skin Sensitization – Possible; Respiratory Sensitization – Possible; Germ Cell Mutagenicity – No data available; Carcinogenicity – Ingredient listed by IARC, ACGIH, NTP or OSHA; Reproductive Toxicity – No data available; Specific Target Organ Toxicity — Single Exposure – Central nervous system; 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 101-68-8 Oral, rat LD₅₀ 9200 mg/kg; CAS 77-58-7 Oral, rat LD₅₀ 2071 mg/kg;
ATE not available in this document.

Section 12. Ecological information

Ecotoxicity (aquatic and terrestrial information)

No data available for the product.

Persistence and degradability

No data available

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

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	Refer to Section 2 for the appropriate classification. 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	
<p>United States OSHA information: This product is regulated according to OSHA (29 CFR).</p> <p>United States EPA (Environmental Protection Agency) information: 40 CFR Refer to the ingredients listed in Section 3 & Sections 12; 13 & 14.</p> <p>United States TCSA information: Refer to the ingredients listed in Section 3.</p> <p>National Fire Protection Association (NFPA):</p> <p>HEALTH: 2 FLAMMABILITY: 1 INSTABILITY: 0 SPECIAL HAZARDS: Refer to Section 2 & 3.</p> <p>HAZARD SCALE: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe</p> <p>California Proposition 65: This product may contain traces of an ingredient known to the State of California to cause cancer or other reproductive harm.</p>	

Section 16. Other information	
Date of the latest revision of the safety data sheet	May 29, 2017 version 1 (NSS ENTREPRISE INC.)
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
CFR	Code of Federal Regulations
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
<p>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.</p>	