1. PRODUCT AND COMPANY IDENTIFICATION

Product name: LePage® PL Premium 100% Polyurethane Construction Adhesive
IDH number: 1403221

Product use: Adhesive

Company address:
Henkel Canada Corporation
2515 Meadowpine Boulevard
Mississauga, Ontario L5N 6C3

Contact information:
Telephone: 800.624.7767
MEDICAL EMERGENCY Phone: Poison Control Center
1-877-671-4608 (toll free) or 1-303-592-1711
TRANSPORT EMERGENCY Phone: CHEMTREC
1-800-424-9300 (toll free) or 1-703-527-3987

Region: Canada

2. HAZARDS IDENTIFICATION

Physical state: high viscosity
Color: Beige
Odor: like vegetable oil


WARNING: HARMFUL IF INHALED. CAUSES EYE, SKIN AND RESPIRATORY TRACT IRRITATION. MAY CAUSE ALLERGIC SKIN AND RESPIRATORY REACTION.

Relevant routes of exposure: Inhalation, Skin, Eyes, Ingestion

Potential Health Effects:

Inhalation: As a result of previous repeated overexposures or a single large dose, certain individuals will develop isocyanate sensitization (chemical asthma) which will cause them to react to a later exposure to isocyanate at levels well below the TLV. Chronic overexposure to isocyanates has been reported to cause lung damage. Dryness of nasal passages, sore throat, cough, tightness of chest, shortness of breath. Persons suffering from allergic reactions to isocyanates should avoid contact with the product. This product may cause sensitization by inhalation and skin contact. May cause respiratory tract irritation.

Skin contact: Contact with skin can cause irritation and allergic reaction (sensitization) in some individuals. This product may disolor the skin.

Eye contact: Contact with eyes will cause irritation.

Ingestion: Ingestion of this product may cause nausea, vomiting and diarrhea.

Existing conditions aggravated by exposure: Development of preexisting skin or lung allergy symptoms may increase. Asthma.

See Section 11 for additional toxicological information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>CAS NUMBER</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>14807-96-6</td>
<td>30 - 60</td>
</tr>
<tr>
<td>Methylenebis(phenylisocyanate)</td>
<td>101-68-8</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Hydrocarbon C11-25 de aromatized</td>
<td>64742-46-7</td>
<td>10 - 30</td>
</tr>
<tr>
<td>Methylene bisphenyl isocyanate</td>
<td>26447-40-5</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Isocyanic acid, polymethylenepolyphenylene ester</td>
<td>9016-87-9</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>0.1 - 1</td>
</tr>
</tbody>
</table>
4. FIRST AID MEASURES

**Inhalation:**
If inhaled, immediately remove the affected person to fresh air. Immediate medical treatment necessary.

**Skin contact:**
Wash affected area immediately with soap and water. If symptoms develop and persist, get medical attention. Remove contaminated clothes.

**Eye contact:**
In case of contact with the eyes, rinse immediately with plenty of water for 15 minutes, and seek immediate medical attention.

**Ingestion:**
Do not induce vomiting. Rinse the mouth. Drink plenty of water. Immediate medical advice necessary.

**Notes to physician:**
An individual having a dermal or pulmonary sensitization reaction to this material should be removed from further exposure to any diisocyanate. Treatment based on judgement of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

**Flash point:**
> 200 °F (> 93.33 °C) no method

**Autoignition temperature:**
No information available.

**Flammable/Explosive limits - lower:**
1.6 %

**Flammable/Explosive limits - upper:**
10.2 %

**Extinguishing media:**
Water fog. Foam Carbon dioxide.

**Special firefighting procedures:**
Wear self-contained breathing apparatus and full protective clothing, such as turn-out gear. In case of fire, keep containers cool with water spray.

**Unusual fire or explosion hazards:**
None known

**Hazardous combustion products:**
Nitrous gases Irritating fumes. Isocyanate vapors.

**Sensitivity to Mechanical Impact:**
Not available.

**Sensitivity to static discharge:**
Not available.

6. ACCIDENTAL RELEASE MEASURES

Use personal protection recommended in Section 8, isolate the hazard area and deny entry to unnecessary and unprotected personnel.

**Environmental precautions:**
Do not empty into drains / surface water / ground water.

**Clean-up methods:**
Ensure adequate ventilation. Scrape up spilled material and place in a closed container for disposal. Wear suitable protective clothing, gloves and eye/face protection.

7. HANDLING AND STORAGE

**Handling:**
Avoid contact with eyes, skin and clothing. Avoid extreme temperatures. Exposure to vapors of heated MDI can be extremely dangerous. Wash thoroughly after handling. Protect from moisture. Use only with adequate ventilation.
Storage: For safe storage, store between 18.3 °C (64.9 °F) and 40 °C (104°F). Avoid moisture. Keep in a cool, well ventilated area away from heat, sparks and open flame. Keep container tightly closed until ready for use.

For information on product shelf life, please review labels on container or check the Technical Data Sheet.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Employers should complete an assessment of all workplaces to determine the need for, and selection of, proper exposure controls and protective equipment for each task performed.

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>AIHA WEEL</th>
<th>OTHER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>2 mg/m³ TWA Respirable fraction, 20 MPPCF TWA Respirable, 0.1 mg/m³ TWA Respirable, 0.3 mg/m³ TWA Total dust.</td>
<td>None</td>
<td>50 ppm</td>
<td></td>
</tr>
<tr>
<td>Methylenebis(phenylisocyanate)</td>
<td>0.005 ppm TWA</td>
<td>0.02 ppm (0.2 mg/m³) Ceiling</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Hydrocarbon C11-25 dearamatized</td>
<td>None</td>
<td>5 mg/m³ PEL Mist.</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Methylene bisphenyl isocyanate</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Isocyanic acid, polymethylene polyphenylene ester</td>
<td>0.005 ppm TWA</td>
<td>0.02 ppm (0.2 mg/m³) Ceiling</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>0.025 mg/m³ TWA Respirable fraction, 2.4 MPPCF TWA Respirable, 0.1 mg/m³ TWA Respirable, 0.3 mg/m³ TWA Total dust.</td>
<td>None</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

Engineering controls: Local exhaust ventilation is recommended when general ventilation is not sufficient to control airborne contamination below occupational exposure limits.

Respiratory protection: Observe OSHA regulations for respirator use (29 CFR 1910.134). Use a NIOSH approved air-purifying respirator if the potential to exceed established exposure limits exists. Respirator with combination filter for vapor/particulate. However, due to the poor warning properties of MDI, proper fit and timely replacement of filter elements must be ensured.

Eye/face protection: Safety glasses with side-shields. Full face protection should be used if the potential for splashing or spraying of product exists.

Skin protection: Suitable protective clothing

9. PHYSICAL AND CHEMICAL PROPERTIES

- **Physical state:** high viscosity
- **Color:** Beige
- **Odor:** like vegetable oil
- **Odor threshold:** Not available. pH: Neutral
- **Vapor pressure:** Not available. **Boiling point/range:** 172 - 341 °C (341.6 - 645.8 °F) no method
- **Melting point/ range:** Not applicable
- **Specific gravity:** 1.2600
- **Vapor density:** Heavier than air
- **Flash point:** > 200 °F (> 93.33 °C) no method
- **Flammable/Explosive limits - lower:** 1.6 % **Flammable/Explosive limits - upper:** 10.2 %
- **Autoignition temperature:** No information available.
- **Evaporation rate:** Not available.
- **Solubility in water:** Slightly soluble
IDH number: 1403221
Product name: LePage® PL Premium 100% Polyurethane Construction Adhesive

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10. STABILITY AND REACTIVITY

Stability: Stable under normal conditions of storage and use.

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

Hazardous decomposition products: Irritating and/or toxic fumes and gases may be emitted upon the product's decomposition. nitrogen oxides Aromatic isocyanates, carbon oxides.


Conditions to avoid: Avoid moisture. Keep away from open flames, hot surfaces and sources of ignition. Prolonged exposure to heat.

11. TOXICOLOGICAL INFORMATION

Toxicologically synergistic products: Not available.

Refer to the following for Irritancy of Product, Sensitization to Product, Carcinogenicity, Reproductive Toxicity, Teratogenicity, and Mutagenicity.

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>NTP Carcinogen</th>
<th>IARC Carcinogen</th>
<th>OSHA Carcinogen (Specifically Regulated)</th>
<th>ACGIH Carcinogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>No</td>
<td>Group 2B</td>
<td>No</td>
<td>Group A4</td>
</tr>
<tr>
<td>Methylenebis(phenylisocyanate)</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Hydrocarbon C11-25 de aromatized</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Methylene bisphenyl isocyanate</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Isocyanic acid, polymethylenepolyphenylene ester</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>Known To Be Human Carcinogen.</td>
<td>Group 1</td>
<td>No</td>
<td>Group A2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>LD50s and LC50s</th>
<th>Health Effects/Target Organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talc</td>
<td>None</td>
<td>Irritant, Lung, Some evidence of carcinogenicity</td>
</tr>
<tr>
<td>Methylenebis(phenylisocyanate)</td>
<td>Inhalation LC50 (RAT, 4 h) = 0.38 mg/l</td>
<td>Irritant, Respiratory, Allergen</td>
</tr>
<tr>
<td>Hydrocarbon C11-25 de aromatized</td>
<td>None</td>
<td>Irritant</td>
</tr>
<tr>
<td>Methylene bisphenyl isocyanate</td>
<td>None</td>
<td>Allergen, Irritant, Mutagen, Respiratory</td>
</tr>
<tr>
<td>Isocyanic acid, polymethylenepolyphenylene ester</td>
<td>None</td>
<td>Allergen, Irritant, Kidney, Liver, Respiratory</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>None</td>
<td>Immune system, Lung, Some evidence of carcinogenicity</td>
</tr>
</tbody>
</table>

12. ECOLOGICAL INFORMATION

Ecological information: Not available.
13. DISPOSAL CONSIDERATIONS

Information provided is for unused product only.

Recommended method of disposal: Dispose of according to Federal, State and local governmental regulations.

14. TRANSPORT INFORMATION

Canada Transportation of Dangerous Goods - Ground
- Proper shipping name: Not regulated
- Hazard class or division: None
- Identification number: None
- Packing group: None

International Air Transportation (ICAO/IATA)
- Proper shipping name: Environmentally hazardous substance, solid, n.o.s.
- Hazard class or division: 9
- Identification number: UN 3077
- Packing group: III

Water Transportation (IMO/IMDG)
- Proper shipping name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.
- Hazard class or division: 9
- Identification number: UN 3077
- Packing group: III

15. REGULATORY INFORMATION

Canada Regulatory Information
- CEPA DSL/NDSL Status: Contains one or more components listed on the Non-Domestic Substances List. All other components are listed on or are exempt from listing on the Domestic Substances List. Components listed on the NDSL must be tracked by all Canadian Importers of Record as required by Environment Canada. They may be imported into Canada in limited quantities. Please contact Regulatory Affairs for additional details.

United States Regulatory Information
- TSCA 8 (b) Inventory Status: All components are listed or are exempt from listing on the Toxic Substances Control Act Inventory.

16. OTHER INFORMATION

This material safety data sheet contains changes from the previous version in sections: Updated Contact Information in Section 1.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulation (CPR), and the MSDS contains all the information required by the CPR.

Prepared by: Mary Ellen Roddy, Sr. Regulatory Affairs Specialist

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