1 Identification

PRODUCT NAME: CR305 Polyurea Crack & Joint Filler, Part A
SYNONYM: Polyol Part of a Two Component Poured Polyurethane Elastomer
CHEMICAL FAMILY: Polyol
MANUFACTURER / SUPPLIER: Concrete Sealers USA
P.O. Box 1223, Brookfield, WI 53008
info@concretesealersusa.com
888-583-2991
EMERGENCY TELEPHONE: Contact Chemtrec 800-424-9300

NOTE: Chemtrec emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

2 Hazard(s) Identification

Signal Word: WARNING

Skin Contact: Exposure may cause minor irritation, redding, swelling or blistering.
Eye Contact: May cause moderate eye irritation. Prolonged contact with the eyes may cause reversible corneal opacity to occur, with no visual impairment expected.
Ingestion: Single dose oral toxicity is considered to be low. Ingestion may cause irritation of the gastrointestinal tract and discomfort with any or all of the following symptoms: nausea, vomiting, lethargy or diarrhea.
Inhalation: At room temperature, exposures to vapors are minimal due to physical properties; higher temperatures may generate vapor levels sufficient to cause irritation to the respiratory system.
Precautionary Statements: Do not handle until all safety precautions have been read and understood. Do not breathe vapors. In case of inadequate ventilation wear respiratory protection. Wear protective gloves and eye protection. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Store locked up. Keep away from children. Dispose of contents and container in accordance with applicable local, regional and national regulations.
Hazard Statements: Overexposure may cause swelling or blistering to skin. Prolonged contact with the eyes may cause reversible corneal opacity to occur, with no visual impairment expected.
Carcinogenicity: In order to comply with California Proposition 65, we feel obligated to advise that some of our products may conceivably contain trace contaminants of some of the listed chemicals. While not necessarily added to our products as ingredients, some listed chemicals may be present in the raw materials from suppliers and over which we have no control. Therefore, even though some of the listed substances may not be present, a significant risk as defined by the regulations in order to comply with California law, we feel obligated to make the following statement:
Warning: Our products may contain trace amounts of some chemicals considered by the State of California to be carcinogens or reproductive toxicants.
3 Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>% BY WEIGHT</th>
<th>CAS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyether Polyol</td>
<td>60 - 80</td>
<td>53637-25-5</td>
</tr>
<tr>
<td>Di-(methylthio) toluenediamine</td>
<td>8 - 15</td>
<td>106264-3</td>
</tr>
</tbody>
</table>

4 First-Aid Measures

**Eyes:** Open lids wide and flush with large quantities of water for at least 15 minutes. Call a physician, preferably an eye specialist.

**Skin:** Immediately flush skin with water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse, discard shoes. Consult a physician if irritation develops.

**Ingestion:** Immediately drink water to dilute. Don’t attempt to induce vomiting. Consult physician.

**Inhalation:** Remove the patient from the contaminated area to fresh air. Administer oxygen or artificial respiration as needed. Call a physician if after effects occur.

5 Fire-Fighting Measures

**Fire Degradation Products:** Toxic fumes are released in fire situations. Combustion may produce carbon dioxide, carbon monoxide.

**Extinguishing Media:** Use chemical foam, CO2, powder. Where the fire is of major proportions, water spray may also be used. Water or foam may cause frothing if liquid is burning, but it still may be a useful extinguishing agent if carefully applied to the fire.

**Protective equipment:** In case of fire, use normal fire fighting equipment including a NIOSH approved, self contained breathing apparatus (SCBA). Use water to cool containers.

**Explosion Hazards:** Material may be ignited only if preheated to high temperatures, for example in a fire.

6 Accidental Release Measures

**Small Spill:** Absorb with dry chemical absorbent, earth, sand or any other inert material. Wear proper personal protective equipment (see Section 8). Place in a chemical waste container for proper disposal.

**Large Spill:** Create a dike or trench to contain materials. Prevent entry into waterways, sewers, basements or confined areas. Absorb spill with inert material. Place in a chemical waste container for proper disposal.

**Disposal:** Any disposal practice must be in compliance with all federal, state and local laws and regulations. Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. Waste characterization and disposal compliance is the responsibility solely of the party generating the waste or deciding to discard or dispose of the material.
## 7 Handling and Storage

**Storage:** When stored between 55°F (minimum) and 120°F (maximum) in tightly sealed containers. Keep in a cool, dry and well ventilated place. Product is hygroscopic. Protect from moisture.

**Handling:** Avoid contact with skin, eyes, and clothing. Do not take internally. Use personal protective equipment when transferring material to or from drums, totes or other containers. Safety glasses and gloves are the minimum protection. Additional precautions must be used when splash hazards are present.

**Shelf Life:** 6 months.

## 8 Exposure Controls / Personal Protection

**Respiratory Protection:** If adequate engineering controls are not feasible, an approved respirator must be worn (type: mist, organic vapor).

**Ventilation:** Good mechanical ventilation and local exhaust.

**Protective Gloves:** Rubber or polyethylene.

**Eye Protection:** Chemical splash goggles or safety glasses or full face shield must be used consistent with splash hazard present.

**Protective Clothing:** Wear impervious clothing and gloves. Materials may include butyl rubber, nitrile rubber, neoprene and Saranex coated Tyvek.

**Protective Equipment:** Disposable containers and paper on work area. Use of barrier cream recommended. Use appropriate equipment to prevent eye or skin contact.

## 9 Physical and Chemical Properties

**Physical State:** Liquid

**Color:** Dark Gray

**Odor:** Low (slightly musty)

**pH:** Not Established

**Freezing Point:** < 32°F

**Decomposition Temperature:** >392°F / 200°C

**Specific Gravity:** 1.03 (water=1) at (74°F)

**Flash Point:** >230°F / 100°C

**Boiling Point:** > 300°F

**Solubility:** In water: at 68°F / 20°C: low

In solvents: YES (soluble in many organic solvents: benzene hydrocarbons and chlorinated hydrocarbons, acetone, phthalates).

## 10 Stability and Reactivity

**Stability:** Stable under recommended storage conditions.

**Hazardous Polymerization:** Will not occur.

**Reactivity:** Incompatibility Materials to Avoid: Oxidizers. Avoid contact with acids or isocyanates.

**Hazardous Decomposition Products:** By Fire: Carbon monoxide, carbon dioxide, oxides of nitrogen, oxides of sulfur.

**Conditions to Avoid:** Temperature extremes, container contamination.
11 Toxicological Information

Acute Toxicity: Inhalation may result in respiratory irritation. Ingestion may result in gastric disturbances.
Routes of Entry: Inhalation, skin contact, eye contact, ingestion.

12 Ecological Information

Aquatic Toxicity:
Comments: Marine pollutant.

13 Disposal Considerations

Disposal: Any disposal practice must be in compliance with all federal, state and local laws and regulations. Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. Waste characterization and disposal compliance is the responsibility solely of the party generating the waste or deciding to discard or dispose of the material. Refer to RCRA 4 CFR 261 and/or any other appropriate federal, state or local requirements for proper classification information.

Container Disposal: Drums/containers should be decontaminated and either passed to an approved drum recycler or destroyed.

RCRA/EPA Waste Information: The generation of waste should be avoided or minimized whenever possible. Chemical waste, even small quantities, should never be poured down drains, sewers or waterways.

14 Transport Information

DOT (Domestic surface): Shipping name: Compound resin. Not regulated (Class 55).
IMO (Ocean): Marine pollutant. Contact manufacturer for information before shipping by vessel.
ICAO (AIR): Not restricted.

15 Regulatory Information

TSCA Status: On the TSCA inventory or are exempt.
CERCLA Reportable Quantity: No chemicals in this material with known CAS are subject to the reporting requirements of CERCLA.
SARA Title III
Section 311/312 Hazard Categories: Immediate Health Hazard, Delayed Health Hazard.
Section 313 Toxic Chemicals: This chemical does not contain any chemical components with known CAS numbers that exceed their de minimis reporting levels.
RCRA Status: Not hazardous if discarded in it's purchased form. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste (40 CFR 261.20-24).

Continues on next page
CR305 Polyurea Crack & Joint Filler, Part A

16 Other Information

All statements, technical information and recommendations contained herein are based upon available scientific test or data which we believe to be reliable since we cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used. Concrete Seals USA makes no warranties, express or implied, and assumes no responsibility in connection with any use of this information.

Personal Protection: B

<table>
<thead>
<tr>
<th>NFPA Ratings:</th>
<th>HMIS Ratings:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

RATINGS

0 = insignificant  1 = slight  2 = moderate  3 = high  4 = extreme

FLAMMABILITY

1 = low

HEALTH

0 = insignificant  1 = slight  2 = moderate  3 = high  4 = extreme

REACTIVITY

1 = low
## 1 Identification

**PRODUCT NAME:** CR305 Polyurea Crack & Joint Filler, Part B  
**SYNONYM:** Isocyanate Part of a Two Component Poured Polyurethane Elastomer  
**CHEMICAL FAMILY:** Diisocyanate  
**MANUFACTURER / SUPPLIER:** Concrete Sealers USA  
P.O. Box 1223, Brookfield, WI 53008  
info@concretesealersusa.com  
888-583-2991  
**EMERGENCY TELEPHONE:** Contact Chemtrec 800-424-9300  

NOTE: Chemtrec emergency number is to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

## 2 Hazard(s) Identification

### Skin Contact
Skin contact can cause reddening, swelling, rash, scaling or blistering. In those who have developed a skin sensitization, these symptoms can develop as a result of a very small amount of liquid material or vapors.

### Eye Contact
Liquid, vapors, or mist are irritating to the eyes and can cause tearing, stinging, burning, redding or swelling. If left untreated, corneal damage can occur and injury is slow to heal. Damage is usually reversible.

### Ingestion
Ingestion could result in irritation and corrosive action in the mouth, stomach tissue and digestive tract. These irritations would be followed by vomiting and cramps.

### Inhalation
Inhalation of vapors or mist may cause respiratory irritation (nose, throat, lungs). Chronic inhalation can result in sensitization.

**Precautionary Statements:** Do not handle until all safety precautions have been read and understood. Do not breathe vapors. In case of inadequate ventilation wear respiratory protection. Wear protective gloves and eye protection. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Store locked up. Keep away from children. Dispose of contents and container in accordance with applicable local, regional and national regulations.

**Signal Word:** WARNING

**Signal Word:** DANGER

**Hazard Statement:** Chronic: As a result of previous repeated overexposure or a single large dose, certain individuals develop isocyanine sensitization (chemical asthma) or tissue injury in the upper respiratory tract. Animal tests indicate skin contact alone may also lead to allergic respiratory reaction. These effects may be permanent. Any person developing asthmatic reaction or other sensitization should be removed from further exposure.

**Potential Health Effects:** At room temperature, MDI vapors are minimal due to low vapor pressure. However, heating, foaming or otherwise dispersing (drumming, venting or pumping) operations may generate more vapor or aerosol concentrations of isocyanate. Excessive exposure may cause irritation of the eyes, upper respiratory tract and lungs. Severe overexposure may lead to pulmonary edema. Respiratory sensitization with asthma like symptoms may occur in susceptible individuals. MDI concentration below the exposure guidelines may cause allergic respiratory reactions in individuals already sensitized. Symptoms may include coughing, dryness of throat, headache, nausea, difficulty breathing and feeling of tightness in the chest. Effects may be delayed. Impaired lung function (decreased ventilators capacity) has been associated with overexposure to isocyanate.

*Persons With Known Respiratory or Allergy Problems Must Not Be Exposed to This Product.*
2 Hazard(s) Identification (Continued)

Carcinogenicity: MDI and polymeric MDI are not listed by the NTP, IARC or regulated by OSHA as carcinogens. Lung tumors have been observed in laboratory animals exposed to aerosol droplets of MDI/Polymeric MDI (6mg/ m3) for their lifetime. Tumors occurred concurrently with respiratory irritation and lung injury. Current exposure guidelines are expected to protect against these effects. **Warning:** Our products may contain trace amounts of some chemicals considered by the State of California to be carcinogens or reproductive toxicants.

3 Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>INGREDIENT</th>
<th>% BY WEIGHT</th>
<th>CAS #</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polymeric Diphenylmethane Diisocyanate</td>
<td>30-40</td>
<td>9016-87-9</td>
</tr>
<tr>
<td>4,4’ Diphenylmethane Diisocyanate</td>
<td>10-30</td>
<td>101-68-8</td>
</tr>
</tbody>
</table>

4 First-Aid Measures

**Eyes:** Open lids wide and flush with large quantities of water for at least 15 minutes. Call a physician, preferably an eye specialist.

**Skin:** Immediately wash skin thoroughly with soap and water. Remove contaminated clothing and shoes. Wash clothing before reuse, discard shoes. Consult a physician if irritation develops.

**Ingestion:** Immediately drink 1 or 2 cups of water to dilute. Do not induce vomiting. Consult physician.

**Inhalation:** Remove the patient from the contaminated area to fresh air. Administer oxygen or artificial respiration as needed. Call a physician if after effects occur.

**Antidotes:** No specific antidote.

**NOTE TO PHYSICIAN:** Systomatic and supportive therapy as needed. Following severe exposure, medical follow-up should be monitored for at least 48 hours. May cause respiratory sensitivity or asthma-like symptoms. Respiratory pulmonary adema, may be delayed.

5 Fire-Fighting Measures

**Fire Degradation Products:** Toxic fumes are released in fire situations. Combustion may produce carbon dioxide, carbon monoxide.

**Extinguishing Media:** Use chemical foam, CO2, powder. Where the fire is of major proportions, water spray may also be used. Water or foam may cause frothing if liquid is burning, but it still may be a useful extinguishing agent if carefully applied to the fire.

**Protective equipment:** In case of fire, use normal fire fighting equipment including a NIOSH approved, self contained breathing apparatus (SCBA). Use water to cool containers.

**Explosion Hazards:** Incomplete combustion or pyrolysis mainly produces oxides of carbon and water. Closed containers may explode if exposed to extreme heat or burst when contaminated with water.
6 Accidental Release Measures

Small Spill: Absorb with dry chemical absorbent, earth, sand or any other inert material. Wear proper personal protective equipment (see Section 8). Place in a chemical waste container for proper disposal.

Large Spill: Create a dike or trench to contain materials. Prevent entry into waterways, sewers, basements or confined areas. Absorb spill with inert material. Place in a chemical waste container for proper disposal.

Disposal: Any disposal practice must be in compliance with all federal, state and local laws and regulations. Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. Waste characterization and disposal compliance is the responsibility solely of the party generating the waste or deciding to discard or dispose of the material.

7 Handling and Storage

Storage: Stored between 65°F (minimum) and 120°F (maximum) in tightly sealed containers. Keep in a cool, dry and well ventilated place. Product is hygroscopic. Protect from moisture. Keep containers away from heat source and open flame. Containers may rupture if exposed to high heat.

Handling: Avoid contact with skin, eyes, and clothing. Do not take internally. Use personal protective equipment when transferring material to or from drums, totes or other containers. Safety glasses and gloves are the minimum protection. Additional precautions must be used when splash hazards are present.

Shelf Life: 6 months.

8 Exposure Controls / Personal Protection

Respiratory Protection: Use adequate ventilation, if adequate ventilation is not available use a MSHA/NIOSH approved respirator.

Ventilation: Good mechanical ventilation and local exhaust.

Protective Gloves: Butyl rubber, neoprene or nitrile.

Eye Protection: Chemical splash goggles or safety glasses or full face shield must be used consistent with splash hazard present.

Protective Clothing: Wear impervious clothing and gloves. Materials may include butyl rubber, nitrile rubber, neoprene and Saranex coated Tyvek.

Protective Equipment: Disposable containers and paper on work area. Use of barrier cream recommended. Use appropriate equipment to prevent eye or skin contact.

Other Use Precautions: Safety showers and eyewash stations should be available.

9 Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Physical State: Liquid</th>
<th>Decomposition Temperature: &gt;392°F / 200°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color: Amber</td>
<td>Specific Gravity: 1.08 (water=1) at (74°F)</td>
</tr>
<tr>
<td>Odor: Low (Slightly Musty)</td>
<td>Flash Point: &gt;230°F / 100°C</td>
</tr>
<tr>
<td>pH: Not Established</td>
<td>Boiling Point: Not Established</td>
</tr>
<tr>
<td>Freezing Point: Not Established</td>
<td>Viscosity: 1200 to 1500 - Centipose at (74°F)</td>
</tr>
<tr>
<td>Solubility: In water: at 68°F / 20°C: low</td>
<td></td>
</tr>
</tbody>
</table>

In solvents: YES (soluble in many organic solvents: benzene hydrocarbons and chlorinated hydrocarbons, acetone, phthalates).
## 10 Stability and Reactivity

**Stability:** Stable under recommended storage conditions.

**Hazardous Polymerization:** May occur. Contact with moisture or other materials which react with isocyanates (acids, alcohols, bases such as soda, ammonia or amines) or temperature above 400°F / 205°C may cause polymerization.

**Reactivity:** **Incompatibility Materials to Avoid:** Materials containing active hydrogens such as water, alcohol, amines, bases and acids.

**Hazardous Decomposition Products:** At > 500°F Carbon monoxide, oxides of nitrogen, traces of HCN and MDI.

**Conditions to Avoid:** Temperature extremes. Container contamination.

### 11 Toxicological Information

<table>
<thead>
<tr>
<th></th>
<th>ORAL</th>
<th>DERMAL</th>
<th>INHALATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LD50 (rat)</td>
<td>LD50 (rabbit)</td>
<td>LD50 (rat)</td>
</tr>
<tr>
<td>Methylene Bisphenyl Isocyanate (MDI)</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt; 10000 mg/kg</td>
<td>369 mg/m³/4h</td>
</tr>
<tr>
<td>Polymeric Diphenylmethane Diisocyanate</td>
<td>&gt; 5000 mg/kg</td>
<td>&gt; 5000 mg/kg</td>
<td>490 mg/m³/4h</td>
</tr>
<tr>
<td>2,2-dimethyl-1-(methylene)-1,3-propanediyl bis (2-methylpropaneonate)</td>
<td>&gt; 3200 mg/kg</td>
<td>&gt; 18840 mg/kg</td>
<td>&gt; 5.3 mg/L</td>
</tr>
</tbody>
</table>

**Carcinogenic Categories:**
- NTP: Not classified as a carcinogen.
- IARC: Not classified as a carcinogen.
- OSHA: Not classified as a carcinogen.

**Routes of Entry:** Inhalation, skin contact, eye contact, ingestion.

### 12 Ecological Information

**Comments:** No testing for this product as a whole.

### 13 Disposal Considerations

**Disposal:** Any disposal practice must be in compliance with all federal, state and local laws and regulations. Chemical additions, processing, storage, or otherwise altering this material may make the waste management information presented in this SDS incomplete, inaccurate or otherwise inappropriate. Waste characterization and disposal compliance is the responsibility solely of the party generating the waste or deciding to discard or dispose of the material. Refer to RCRA 4 CFR 261 and/or any other appropriate federal, state or local requirements for proper classification information.

**Container Disposal:** Drums/containers should be decontaminated and either passed to an approved drum recycler or destroyed.

**EPA Waste Information:** The generation of waste should be avoided or minimized whenever possible. Chemical waste, even small quantities, should never be poured down drains, sewers or waterways.
## 14 Transport Information

| DOT (Domestic surface): Shipping name | Compound resin. Not regulated (Class 55). |
| IMO (Ocean): | Not restricted. |
| ICAO (AIR): | Not restricted. |

## 15 Regulatory Information

| TSCA Status | On the TSCA inventory or are exempt. |
| CERCLA Reportable Quantity | 4,4’-Methylene diphenyl diisocyanate (CAS 101-68-8) has a 5,000 lb RQ (reportable quantity). |
| SARA Title III | Section 311/312 Hazard Categories: Immediate Health Hazard, Delayed Health Hazard, Reactive hazard. |
| SARA Title III | Section 313 Toxic Chemicals: Reportable ingredients: Diisocyanate compounds. |
| RCRA Status | Not hazardous if discarded in it’s purchased form. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material containing the product or derived from the product should be classified as a hazardous waste (40 CFR 261.20-24). |
| OSHA Hazard Communication rule | This material is classified as a hazardous material under the criteria outlined in the OSHA Hazard Communication Standard (HSC) (29CFR 1910.1200). |

## 16 Other Information

All statements, technical information and recommendations contained herein are based upon available scientific test or data which we believe to be reliable since we cannot anticipate all conditions under which this information and our products or the products of other manufacturers in combination with our products may be used. Concrete Sealers USA makes no warranties, express or implied, and assumes no responsibility in connection with any use of this information.

### NFPA Ratings:

- **Flammability** (1-4):
  - 1 = slight
  - 2 = moderate
  - 3 = high
  - 4 = extreme

- **Health** (1-4):
  - 1 = slight
  - 2 = moderate
  - 3 = high
  - 4 = extreme

- **Reactivity** (1-4):
  - 1 = slight
  - 2 = moderate
  - 3 = high
  - 4 = extreme

### HMIS Ratings:

- **Health** (1-4):
  - 1 = slight
  - 2 = moderate
  - 3 = high
  - 4 = extreme

- **Flammability** (1-4):
  - 1 = slight
  - 2 = moderate
  - 3 = high
  - 4 = extreme

- **Reactivity** (1-4):
  - 1 = slight
  - 2 = moderate
  - 3 = high
  - 4 = extreme