Material Safety Data Sheet
CROSSLINKER CX-100

Section 1. Chemical product and company identification

Product name: CROSSLINKER CX-100
Supplier: Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071

Telephone: +1 (201) 933-8800

Chemical formula: Not applicable.
Material uses: Cross-linking agent.
Emergency telephone number: For chemical emergency, spill, leak, fire, exposure or accident: call CHEMTREC day or night. DOMESTIC NORTH AMERICA 800-424-9300; INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)

Section 2. Hazards identification

Physical state: Liquid.
Odor: Amine-like.
Emergency overview:
CAUSES SEVERE EYE BURNS. MAY CAUSE SEVERE ALLERGIC RESPIRATORY AND SKIN REACTION. POSSIBLE CANCER HAZARD - CONTAINS MATERIAL WHICH MAY CAUSE CANCER, BASED ON ANIMAL DATA. CONTAINS MATERIAL WHICH MAY CAUSE HERITABLE GENETIC EFFECTS, BASED ON ANIMAL DATA.

Severely corrosive to the eyes. Causes severe burns. May cause sensitization by inhalation and skin contact. Avoid exposure - obtain special instructions before use. Do not breathe vapor or mist. Do not get in eyes or on skin or clothing. Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure. Contains material which may cause heritable genetic effects, based on animal data. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.

OSHA/HCS status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Hazardous Material Information System (U.S.A.):

<table>
<thead>
<tr>
<th>Health</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical hazards</td>
<td>1</td>
</tr>
</tbody>
</table>

PERSONAL PROTECTION
The PPE (Personal Protection Equipment) designation in the HMIS is provided for use by employees at supplier sites only. Other users of this product are encouraged to evaluate the hazards of the product and assign PPE that is applicable to their specific situations.

Potential acute health effects

Inhalation: May give off gas, vapor or dust that is very irritating or corrosive to the respiratory system. May cause sensitization by inhalation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.

Ingestion: May cause burns to mouth, throat and stomach.

Continued on next page
Skin : May cause sensitization by skin contact.
Eyes : Severely corrosive to the eyes. Causes severe burns.

**Potential chronic health effects**

**Chronic effects** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : Contains material which may cause cancer, based on animal data. Risk of cancer depends on duration and level of exposure.

**Mutagenicity** : Contains material which may cause heritable genetic effects, based on animal data.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

**Medical conditions aggravated by over-exposure** : Pre-existing respiratory and skin disorders may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

### Section 3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyfunctional Aziridine Crosslinker</td>
<td>64265-57-2</td>
<td>99</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

### Section 4. First aid measures

**Eye contact** : Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Get medical attention immediately.

**Skin contact** : Take off immediately all contaminated clothing. Wash with soap and water. Get medical attention.

**Inhalation** : If inhaled, remove to fresh air. Prevent cooling of the person. Keep victim at rest in half-upright position. If not breathing, give artificial respiration. Get medical attention.

**Ingestion** : If swallowed, rinse mouth with water (only if the person is conscious). Seek medical attention.

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

**Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

### Section 5. Fire-fighting measures

**Flammability of the product** : In a fire or if heated, a pressure increase will occur and the container may burst.

**Hazardous thermal decomposition products** : In case of fire, may produce hazardous decomposition products such as carbon monoxide, carbon dioxide, (dense) black smoke, aldehydes, organic acids, nitrogen oxides (NO, NO₂ etc.), ammonia (NH₃), amines.

**Extinguishing media**

**Suitable** : Use water, foam or dry chemical powder.

**Special fire-fighting procedures** : Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

*Continued on next page*
Section 6. Accidental release measures

| Protection of fire-fighters | Wear suitable protective clothing. Self-contained breathing apparatus. |

Section 7. Handling and storage

| Handling | Preferably use in closed systems. Use with adequate ventilation. Use suitable protective equipment. Avoid contact with eyes, skin and clothing. |
| Storage | Store in a fireproof location. Keep away from incompatible materials and avoid specific conditions (See section 10). |
| Storage temperature | Store between the following temperatures: 5 and 40 °C. |

Section 8. Exposure controls/personal protection

| Engineering controls | Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. |

| Personal protection | Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts. |
| Skin | Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. |
| Respiratory | Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. |
| Hands | Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. |

| Product name | Exposure limits |
| Not available | Consult local authorities for acceptable exposure limits. |

Section 9. Physical and chemical properties

| Physical state | Liquid. |
| Flash point | Closed cup: 253°C (487.4°F) [Setaflash.] |
| Color | Light yellow. |
| Odor | Amine-like. |
| Melting/freezing point | -30°C (-22°F) |
| Specific gravity | 1.08 |

Continued on next page
Section 10. Stability and reactivity

**Stability and reactivity**
- The product is stable.

**Conditions to avoid**
- Keep away from heat, sparks and flame.

**Materials to avoid**
- Acids, Strong oxidizing materials.

**Hazardous decomposition products**
- Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**Possibility of hazardous reactions**
- Under normal conditions of storage and use, hazardous reactions will not occur.

Section 11. Toxicological information

### Acute toxicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyfunctional Aziridine</td>
<td>LD50 Oral</td>
<td>Rat</td>
<td>3038 mg/kg</td>
<td>-</td>
</tr>
<tr>
<td>Crosslinker</td>
<td>LDLo Dermal</td>
<td>Rabbit</td>
<td>2 g/kg</td>
<td>-</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: Not available.

### Chronic toxicity

**Conclusion/Summary**: Not available.

### Irritation/Corrosion

**Conclusion/Summary**: Not available.

### Sensitizer

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Route of exposure</th>
<th>Species</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyfunctional Aziridine Crosslinker</td>
<td>skin</td>
<td>Mammal - species unspecified</td>
<td>Sensitizing</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: Not available.

### Carcinogenicity

**Conclusion/Summary**: Not available.

### Mutagenicity

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Test</th>
<th>Experiment</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyfunctional Aziridine Crosslinker</td>
<td>-</td>
<td>Experiment: In vitro&lt;br&gt;Subject: Mammalian-Animal&lt;br&gt;Metabolic activation: Chromosomal Abberation Chinese Hampster</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Micronucleus test</td>
<td>Experiment: In vivo&lt;br&gt;Subject: Mammalian-Animal&lt;br&gt;Metabolic activation: Chromosomal Abberation Mouse Micronucleus</td>
<td>Positive</td>
</tr>
<tr>
<td></td>
<td>Ames test</td>
<td>Subject: Bacteria</td>
<td>Positive</td>
</tr>
</tbody>
</table>

**Conclusion/Summary**: Not available.

### Teratogenicity

**Conclusion/Summary**: Not available.

### Reproductive toxicity

**Conclusion/Summary**: Not available.

**Continued on next page**
Section 12. Ecological information

Ecotoxicity: No known significant effects or critical hazards.

Aquatic ecotoxicity: Not available.

Persistence/degradability: Not available.

Section 13. Disposal considerations

Waste disposal: Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Section 14. Transport information

<table>
<thead>
<tr>
<th>Regulatory information</th>
<th>UN number</th>
<th>Proper shipping name</th>
<th>Class</th>
<th>Packing group</th>
<th>Label</th>
<th>Additional information</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOT Classification</td>
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<tr>
<td>TDG Classification</td>
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<td>Mexico Classification</td>
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<td>ADR/RID Class</td>
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<tr>
<td>IMDG Class</td>
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<tr>
<td>IATA-DGR Class</td>
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<td>-</td>
<td></td>
</tr>
</tbody>
</table>

Section 15. Regulatory information

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs): Not listed

SARA 313

Form R - Reporting requirements: No products were found.

Product name | CAS number | Concentration |
--------------|------------|---------------|

Continued on next page
State regulations:
- Connecticut Carcinogen Reporting: None of the components are listed.
- Connecticut Hazardous Material Survey: None of the components are listed.
- Florida substances: None of the components are listed.
- Illinois Chemical Safety Act: None of the components are listed.
- Illinois Toxic Substances Disclosure to Employee Act: None of the components are listed.
- Louisiana Reporting: None of the components are listed.
- Louisiana Spill: None of the components are listed.
- Massachusetts Spill: None of the components are listed.
- Massachusetts Substances: None of the components are listed.
- Michigan Critical Material: None of the components are listed.
- Minnesota Hazardous Substances: None of the components are listed.
- New Jersey Hazardous Substances: None of the components are listed.
- New Jersey Spill: None of the components are listed.
- New Jersey Toxic Catastrophe Prevention Act: None of the components are listed.
- New York Acutely Hazardous Substances: None of the components are listed.
- New York Toxic Chemical Release Reporting: None of the components are listed.
- Pennsylvania RTK Hazardous Substances: None of the components are listed.
- Rhode Island Hazardous Substances: None of the components are listed.

California Prop. 65
WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Cancer</th>
<th>Reproductive</th>
<th>No significant risk level</th>
<th>Maximum acceptable dosage level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aziridine, 2-methyl-</td>
<td>Yes.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
</tbody>
</table>

United States inventory (TSCA 8b): All components are listed or exempted.

Section 16. Other information

National Fire Protection Association (U.S.A.):

Date of printing: 4/5/2013.
Date of issue: 4/5/2013.
Date of previous issue: No previous validation.
Version: 1
Product ID: 000000188871

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