1. Identification

Product name: Sikaflex®-1c SL
Supplier: Sika Corporation
Address: 201 Polito Avenue
Lyndhurst, NJ 07071
USA
www.sikausa.com
Telephone: (201) 933-8800
Telefax: (201) 804-1076
Emergency telephone: CHEMTREC: 800-424-9300
INTERNATIONAL: 703-527-3887
ehs@sika-corp.com

Recommended use of the chemical and restrictions on use:
For further information, refer to the product technical data sheet.

2. Hazards identification

GHS Classification
Flammable liquids, Category 4
Respiratory sensitization, Category 1
Skin sensitization, Category 1
Carcinogenicity, Category 1A

H227: Combustible liquid.
H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317: May cause an allergic skin reaction.
H350: May cause cancer.

GHS Label element
Hazard pictograms:
Signal Word: Danger
Hazard Statements:

Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves.
P281 Use personal protective equipment as required.
P285 In case of inadequate ventilation wear respiratory protection.

**Response:**
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P304 + P341 IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment for extinction.

**Storage:**
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.

**Disposal:**
P501 Dispose of contents/container to an approved waste disposal plant.

**Warning:** Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.

See Section 11 for more detailed information on health effects and symptoms.

### 3. Composition/information on ingredients

**Hazardous ingredients**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>1330-20-7</td>
<td>&gt;= 2 - &lt; 5 %</td>
</tr>
<tr>
<td>titanium dioxide</td>
<td>13463-67-7</td>
<td>&gt;= 2 - &lt; 5 %</td>
</tr>
<tr>
<td>isophoronedialdimine</td>
<td>932742-30-8</td>
<td>&gt;= 1 - &lt; 2 %</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>&gt;= 0 - &lt; 1 %</td>
</tr>
<tr>
<td>Quartz (SiO2)</td>
<td>14808-60-7</td>
<td>&gt;= 0 - &lt; 1 %</td>
</tr>
<tr>
<td>Aliphatic polysisocyanate</td>
<td>28182-81-2</td>
<td>&gt;= 0 - &lt; 1 %</td>
</tr>
<tr>
<td>4,4’-methylene diphenyl disocyanate</td>
<td>101-68-8</td>
<td>&gt;= 0 - &lt; 1 %</td>
</tr>
<tr>
<td>Hindered amine derivatives</td>
<td>Proprietary</td>
<td>&gt;= 0 - &lt; 1 %</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.
4. First aid measures

If inhaled: Move to fresh air. Consult a physician after significant exposure.

In case of skin contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician.

In case of eye contact: Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.

If swallowed: Clean mouth with water and drink afterwards plenty of water. Induce vomiting immediately and call a physician. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed:
- Asthmatic appearance
- Allergic reactions
- See Section 11 for more detailed information on health effects and symptoms.
- Sensitizing effects
- Carcinogenic effects

Protection of first-aiders: Move out of dangerous area. Consult a physician. Show this material safety data sheet to the doctor in attendance.

Notes to physician: Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media: Carbon dioxide (CO2)

Unsuitable extinguishing media: Water

Specific extinguishing methods: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for fire-fighters: In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Deny access to unprotected persons.
Environmental precautions: Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

7. Handling and storage

Advice on safe handling: Avoid formation of aerosol. Do not breathe vapors or spray mist. Avoid exceeding the given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene measures when handling chemical products.

Conditions for safe storage: Prevent unauthorized access. Store in original container. Keep in a well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Store in accordance with local regulations.

Materials to avoid: no data available

8. Exposure controls/personal protection

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No.</th>
<th>Basis **</th>
<th>Value</th>
<th>Exposure limit(s)* / Form of exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>1330-20-7</td>
<td>OSHA Z-1</td>
<td>TWA</td>
<td>100 ppm 435 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>ACGIH TWA 100 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>ACGIH</td>
<td>STEL</td>
<td>150 ppm</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA P0</td>
<td>STEL</td>
<td>150 ppm 655 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA P0</td>
<td>TWA</td>
<td>100 ppm</td>
</tr>
</tbody>
</table>
### Engineering measures
Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits.

### Personal protective equipment

**Respiratory protection**
Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

**Hand protection**
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.
Eye protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary.

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. Remove respiratory and skin/eye protection only after vapors have been cleared from the area. Remove contaminated clothing and protective equipment before entering eating areas. Wash thoroughly after handling.

9. Physical and chemical properties

Appearance: viscous liquid
Color: various
Odor: aromatic
Odor Threshold: no data available
Flash point: 185 °F (85 °C)
Ignition temperature: not applicable
Decomposition temperature: no data available
Lower explosion limit (Vol%): no data available
Upper explosion limit (Vol%): no data available
Flammability (solid, gas): no data available
Oxidizing properties: no data available
Autoignition temperature: no data available
pH: no data available
Melting point/range / Freezing point: no data available
Boiling point/boiling range: no data available
Vapor pressure: no data available
Density: 1.27 g/cm³
Water solubility: Note: insoluble
Partition coefficient: n-: no data available
octanol/water
Viscosity, dynamic : no data available
Viscosity, kinematic : > 20.5 mm²/s
at 104 °F (40 °C)
Relative vapor density : no data available
Evaporation rate : no data available
Burning rate : no data available
Volatile organic compounds (VOC) content : 32.5 g/l

10. Stability and reactivity
Reactivity : No dangerous reaction known under conditions of normal use.
Chemical stability : The product is chemically stable.
Possibility of hazardous reactions: Stable under recommended storage conditions.
Conditions to avoid : Extremes of temperature and direct sunlight.
Incompatible materials : no data available

11. Toxicological information
Acute toxicity
Product
Acute oral toxicity : no data available
Acute inhalation toxicity : no data available
Acute dermal toxicity : no data available

Ingredients:
Isophoronedialdimine:
Acute oral toxicity : LD50 Oral rat: > 2,000 mg/kg
Acute dermal toxicity : LD50 Dermal rabbit: > 2,000 mg/kg

4,4’-methylenediphenyl diisocyanate:
Acute inhalation toxicity : Acute toxicity estimate: 1.5 mg/l
Test atmosphere: dust/mist
Method: Expert judgment
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Print Date 07/30/2014

Skin corrosion/irritation

Product
no data available

Serious eye damage/eye irritation

Product
no data available

Respiratory or skin sensitization

Product
May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity

Product
Mutagenicity : no data available

Carcinogenicity

Product
Carcinogenicity : May cause cancer.

IARC
Group 1: Carcinogenic to humans
Quartz (SiO2) 14808-60-7
Group 2B: Possibly carcinogenic to humans
titanium dioxide 13463-67-7
ethylbenzene 100-41-4

NTP
Known to be human carcinogen
Quartz (SiO2) 14808-60-7

Reproductive Toxicity/Fertility

Product
Reproductive toxicity : no data available

Reproductive Toxicity/Development/Teratogenicity

Product
Teratogenicity : no data available

STOT-single exposure

Product
Assessment: no data available

STOT-repeated exposure

Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Product**
Assessment: no data available

**Aspiration toxicity**
**Product**
no data available

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### 12. Ecological information

**Other information**
Do not empty into drains; dispose of this material and its container in a safe way.
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**Component:**
Isophoronedialdimine 932742-30-8

**Toxicity to fish:**
- **LC50**
  - Species: Fish
  - Dose: 87.2 mg/l
  - Exposure time: 96 h

**Toxicity to daphnia and other aquatic invertebrates:**
- **EC50**
  - Species: Daphnia
  - Dose: > 100 mg/l
  - Exposure time: 48 h

**Toxicity to algae:**
- **EC50**
  - Species: Desmodesmus subspicatus (green algae)
  - Dose: 180.4 mg/l
  - Exposure time: 72 h

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### 13. Disposal considerations

**Disposal methods**

**Waste from residues**: 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.

**Contaminated packaging**: Empty containers should be taken to an approved waste handling site for recycling or disposal.

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### 14. Transport information
DOT
Not dangerous goods
IATA
Not dangerous goods
IMDG
Not dangerous goods

Special precautions for user
no data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
not applicable

15. Regulatory information

TSCA list : All chemical substances in this product are either listed on the TSCA Inventory or are in compliance with a TSCA Inventory exemption.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA304 Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Fire Hazard
Chronic Health Hazard
Acute Health Hazard

SARA 302 : SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:
xylene 1330-20-7 2.50 %

Clean Air Act

Ozone-Depletion Potential This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 12 (40 CFR 61):
xylene 1330-20-7 2.50 %

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
California Prop 65

WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

WARNING! This product contains a chemical known in the State of California to cause cancer.

16. Other information

HMIS Classification

<table>
<thead>
<tr>
<th>Health</th>
<th>* 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flammability</td>
<td>2</td>
</tr>
<tr>
<td>Physical Hazard</td>
<td>0</td>
</tr>
<tr>
<td>Personal Protection</td>
<td>X</td>
</tr>
</tbody>
</table>

Caution: HMIS® rating is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating is not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® rating is to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). Please note HMIS® attempts to convey full health warning information to all employees.

Notes to Reader

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Revision Date 07/30/2014

Material number: 435861