1. Identification

Product name : Sikadur®-22 Lo-Mod FS Part B

Supplier : Sika Corporation
201 Polito Avenue
Lyndhurst, NJ 07071
USA
www.sikausa.com

Telephone : (201) 933-8800
Telefax : (201) 804-1076
E-mail address : ehs@sika-corp.com
Emergency telephone : CHEMTREC: 800-424-9300
INTERNATIONAL: 703-527-3887

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

2. Hazards identification

GHS Classification

Acute toxicity, Category 4 (Oral) H302: Harmful if swallowed.
Skin irritation, Category 2 H315: Causes skin irritation.
Serious eye damage, Category 1 H318: Causes serious eye damage.
Skin sensitization, Category 1 H317: May cause an allergic skin reaction.
Reproductive toxicity, Category 2 H361: Suspected of damaging fertility or the unborn child.

GHS label elements

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : H302: Harmful if swallowed.
H315: Causes skin irritation.
H317: May cause an allergic skin reaction.
H318: Causes serious eye damage.
H361: Suspected of damaging fertility or the unborn child.

Precautionary Statements : Prevention:
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/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P272 Contaminated work clothing must not be allowed out of the workplace.
P280 Wear protective gloves/ eye protection/ face protection.
P281 Use personal protective equipment as required.

Response:
P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.
P310 Immediately call a POISON CENTER/doctor.
P330 Rinse mouth.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.

Storage:
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.
There are no hazards not otherwise classified that have been identified during the classification process.
There are no ingredients with unknown acute toxicity used in a mixture at a concentration >= 1%.

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>Phenol, 4-nonyl, branched</td>
<td>84852-15-3</td>
<td>&gt;= 50 - &lt;= 100 %</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>&gt;= 5 - &lt; 10 %</td>
</tr>
<tr>
<td>2-Methyl-1,5-pentamethylenediamine</td>
<td>15520-10-2</td>
<td>&gt;= 5 - &lt; 10 %</td>
</tr>
<tr>
<td>Polyoxypropylenediamine</td>
<td>9046-10-0</td>
<td>&gt;= 5 - &lt; 10 %</td>
</tr>
<tr>
<td>m-phenylenebis(methylamine)</td>
<td>1477-55-0</td>
<td>&gt;= 3 - &lt; 5 %</td>
</tr>
<tr>
<td>2,4,6-tris(dimethylaminomethyl)phenol</td>
<td>90-72-2</td>
<td>&gt;= 3 - &lt; 5 %</td>
</tr>
<tr>
<td>Isophoronediamine</td>
<td>2855-13-2</td>
<td>&gt;= 3 - &lt; 5 %</td>
</tr>
<tr>
<td>4-tert-butylphenol</td>
<td>98-54-4</td>
<td>&gt;= 3 - &lt; 5 %</td>
</tr>
<tr>
<td>Cycloaliphatic polyamine</td>
<td>Proprietary</td>
<td>&gt;= 3 - &lt; 5 %</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:
- Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
- In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- Continue rinsing eyes during transport to hospital.
- Remove contact lenses.
- Keep eye wide open while rinsing.

If swallowed:
- Clean mouth with water and drink afterwards plenty of water.
- Do not induce vomiting without medical advice.
- Do not give milk or alcoholic beverages.
- Never give anything by mouth to an unconscious person.
- Obtain medical attention.

Most important symptoms and effects, both acute and delayed:
- Irritant effects
- Sensitizing effects

Gastrointestinal discomfort
Allergic reactions
Excessive lachrymation
Erythema
Dermatitis
See Section 11 for more detailed information on health effects and symptoms.

Harmful if swallowed.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye damage.
Suspected of damaging fertility or the unborn child.

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:
- Use extinguishing measures that are appropriate to local
circumstances and the surrounding environment.

**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.

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### 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.

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### 7. Handling and storage

**Advice on safe handling**

- 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**

- Store in original container.
- Keep container tightly closed in a dry and 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>m-phenylenebis(methylamine)</td>
<td>1477-55-0</td>
<td>ACGIH</td>
<td>C</td>
<td>0.1 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>OSHA P0</td>
<td>C</td>
<td>0.1 mg/m3</td>
</tr>
</tbody>
</table>

*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

**Basis
ACGIH: Threshold Limit Values (TLV)
OSHA P0: Table Z-1, Limit for Air Contaminant (1989 Vacated Values)
OSHA P1: Permissible Exposure Limits (PEL), Table Z-1, Limit for Air Contaminant
OSHA P2: Permissible Exposure Limits (PEL), Table Z-2
OSHA Z3: Table Z-3, Mineral Dust

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.

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 contaminated clothing and protective equipment before entering eating areas. Wash thoroughly after handling.

9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
</tr>
<tr>
<td>Color</td>
<td>light yellow</td>
</tr>
<tr>
<td>Odor</td>
<td>amine-like</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 212 °F (&gt; 100 °C)</td>
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<tr>
<td>Ignition temperature</td>
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<tr>
<td>Decomposition temperature</td>
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<tr>
<td>Lower explosion limit (Vol%)</td>
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</tr>
<tr>
<td>Upper explosion limit (Vol%)</td>
<td>No data available</td>
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<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
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<tr>
<td>Oxidizing properties</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>Note: Not applicable</td>
</tr>
<tr>
<td>Melting point/range / Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point/boiling range</td>
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<tr>
<td>Vapor pressure</td>
<td>0.22 mmHg (0.29 hpa)</td>
</tr>
<tr>
<td>Density</td>
<td>0.96 g/cm3 at 73 °F (23 °C)</td>
</tr>
<tr>
<td>Water solubility</td>
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</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
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</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>&gt; 20.5 mm2/s at 104 °F (40 °C)</td>
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<tr>
<td>Relative vapor density</td>
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</tr>
<tr>
<td>Evaporation rate</td>
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<tr>
<td>Burning rate</td>
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</tr>
<tr>
<td>Volatile organic compounds</td>
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</tr>
</tbody>
</table>
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: No data available
Incompatible materials: No data available

11. Toxicological information

Acute toxicity
Harmful if swallowed.

Components:

Phenol, 4-nonyl, branched:
Acute dermal toxicity: LD50 Dermal (Rabbit): 3,160 mg/kg

Benzyl alcohol:
Acute oral toxicity: LD50 Oral (Rat): 1,620 mg/kg
Acute inhalation toxicity: 
LC50 (Rat): > 4.178 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

2-Methyl-1,5-pentamethylenediamine:
Acute oral toxicity: LD50 Oral (Rat): 1,170 mg/kg
Acute dermal toxicity: LD50 Dermal (Rabbit): 1,870 mg/kg
m-phenylenebis(methylamine):
Acute oral toxicity: LD50 Oral (Rat): 930 mg/kg
Acute inhalation toxicity: LC50 (Rat): 1.34 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Acute dermal toxicity: LD50 Dermal (Rabbit): > 3,100 mg/kg

2,4,6-tris(dimethylaminomethyl)phenol:
Acute oral toxicity: LD50 Oral (Rat): 2,169 mg/kg

Isophoronediamine:
Acute oral toxicity: LD50 Oral (Rat): 1,030 mg/kg
Acute inhalation toxicity: LC50 (Rat): > 5.01 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity: LD50 Dermal (Rabbit): > 2,000 mg/kg

**Skin corrosion/irritation**
Causes skin irritation.

**Product:**
Method: In Vitro Membrane Barrier Test Method for Skin Corrosion - CORROSITEX
Result: Skin irritation

**Serious eye damage/eye irritation**
Causes serious eye damage.

**Respiratory or skin sensitization**
Skin sensitization: May cause an allergic skin reaction.
Respiratory sensitization: Not classified based on available information.

**Components:**
**Isophoronediamine:**
Assessment: The product is a skin sensitizer, sub-category 1A.
Result: The product is a skin sensitizer, sub-category 1A.

**Germ cell mutagenicity**
Not classified based on available information.

**Reproductive toxicity**
Suspected of damaging fertility or the unborn child.

**STOT-single exposure**
Not classified based on available information.

**STOT-repeated exposure**
Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
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.

**Aspiration toxicity**
Not classified based on available information.

**Carcinogenicity**
Not classified based on available information.

**IARC**
Not applicable

**NTP**
Not applicable

**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.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
May be harmful to the environment if released in large quantities.
Water polluting material.

**Component:**

**Benzyl alcohol** 100-51-6

**Toxicity to fish:**
- **LC50**
  - Species: Fish
  - Dose: > 100 mg/l
  - Exposure time: 96 h

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

**Polyoxypropylenediamine** 9046-10-0

**Toxicity to algae:**
- **EC50**
  - Species: Pseudokirchneriella subcapitata (algae)
  - Dose: 15 mg/l
  - Exposure time: 72 h

**Toxicity to daphnia and other aquatic invertebrates:**
- **Chronic toxicity:**
  - **EC50**
    - Species: Daphnia magna (Water flea)
    - Concentration: 80.00 mg/l
    - Exposure time: 48 h

**m-phenylenebis(methylamine)** 1477-55-0

**Toxicity to fish:**
- **LC50**
  - Species: Oryzias latipes (Japanese medaka)
  - Dose: > 10 - 100 mg/l
  - Exposure time: 96 h

**Toxicity to daphnia and other aquatic invertebrates:**
- **EC50**
  - Species: Daphnia magna (Water flea)
  - Dose: > 10 - 100 mg/l
  - Exposure time: 48 h

**2,4,6-tris(dimethylaminomethyl)phenol** 90-72-2

**Toxicity to algae:**
- **EC50**
  - Species: Scenedesmus capricornutum (fresh water algae)
  - Dose: > 10 - 100 mg/l
  - Exposure time: 72 h

**Isophoronediamine** 2855-13-2

**Toxicity to algae:**
- **ErC50**
  - Species: Desmodesmus subspicatus (green algae)
  - Dose: > 10 - 100 mg/l
  - Exposure time: 72 h
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.

14. Transport information

**DOT**

<table>
<thead>
<tr>
<th>DOT</th>
<th>UN number</th>
<th>Description of the goods</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>3082</td>
<td>Environmentally hazardous substances, liquid, n.o.s. (Phenol, 4-nonyl, branched)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class</th>
<th>Packing group</th>
<th>Labels</th>
<th>Emergency Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>9</td>
<td>171</td>
<td></td>
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</table>

**IATA**

<table>
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<tbody>
<tr>
<td></td>
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<td>Environmentally hazardous substance, liquid, n.o.s. (Phenol, 4-nonyl, branched)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class</th>
<th>Packing group</th>
<th>Labels</th>
<th>Packing instruction (cargo aircraft)</th>
<th>Packing instruction (passenger aircraft)</th>
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<tbody>
<tr>
<td>III</td>
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<td>964</td>
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**IMDG**

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</thead>
<tbody>
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<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Phenol, 4-nonyl, branched)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Class</th>
<th>Packing group</th>
<th>Labels</th>
<th>EmS Number 1</th>
<th>EmS Number 2</th>
<th>Marine pollutant</th>
</tr>
</thead>
<tbody>
<tr>
<td>III</td>
<td>9</td>
<td>F-A</td>
<td>S-F</td>
<td>yes</td>
<td></td>
</tr>
</tbody>
</table>
DOT & Domestic Aircraft: As per 49 CFR 171.4, Non-bulk materials (<119 Gal) are excepted from being classed as a Marine Pollutant.
IMDG: For Limited Quantity special provisions reference IMDG Code Chapter 3.4

Special precautions for use
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: Chronic Health Hazard
Acute toxicity (any route of exposure)
Respiratory or skin sensitization
Reproductive toxicity
Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302: This material does not contain any components with a section 302 EHS TPQ.

SARA 313: The following components are subject to reporting levels established by SARA Title III, Section 313:
Phenol, 4-nonyl, branched 84852-15-3 59.00 %

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).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).
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
This product does not contain any chemicals known to the State
of California to cause cancer, birth, or any other reproductive defects.

16. Other information

HMIS Classification

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>3</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</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
The information contained in this Safety Data Sheet applies only to the actual Sika Corporation ("Sika") product identified and described herein. This information is not intended to address, nor does it address the use or application of the identified Sika product in combination with any other material, product or process. All of the information set forth herein is based on technical data regarding the identified product that Sika believes to be reliable as of the date hereof. Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's current Product Data Sheet, product label and Safety Data Sheet for each Sika product, which are available at website and/or telephone number listed in Section 1 of this SDS.

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All sales of Sika products are subject to its current terms and conditions of sale available at www.sikausa.com or 201-933-8800.

Revision Date 08/15/2018

Material number: 538492