SAFETY DATA SHEET
Sikafloor®-400 N Elastic

Version 1.0  MSDS Number: 000000100532  Revision Date: 2016/01/18

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Sikafloor®-400 N Elastic
Product code : 000000100532
Type of product : liquid

Recommended use of the chemical and restrictions on use
Product use : Polyurethane coating, Product is not intended for consumer use

Manufacturer or supplier’s details
Company : Sika (Thailand) Limited
700/37 Moo. 5  Amata Nakorn Estate
Bangna-Trad Km.57
Tambol Klong Tamhru
Muang District
Chonburi 20000
Thailand

Telephone : +66 3810 9500
Emergency telephone number : +66 3821 4270-85
Telefax : +66 3821 4286
E-mail address : Sikathai@th.sika.com

2. HAZARDS IDENTIFICATION

GHS Classification
Flammable liquids : Category 3
Acute toxicity (Inhalation) : Category 5
Skin corrosion/irritation : Category 3
Skin sensitisation : Category 1
Acute aquatic toxicity : Category 3
Chronic aquatic toxicity : Category 3

GHS Label element
Hazard pictograms :

Signal word : Warning
Hazard statements:
H226 Flammable liquid and vapour.
H316 Causes mild skin irritation.
H317 May cause an allergic skin reaction.
H333 May be harmful if inhaled.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:
Prevention:
P210 Keep away from heat/sparks/open flames/hot surfaces.
No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting/equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/eye protection/face protection.

Response:
P303 + P361 + P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
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 dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.

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

Other hazards which do not result in classification
None known.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture: Mixture

<table>
<thead>
<tr>
<th>Chemical components</th>
<th>CAS-No.</th>
<th>Concentration (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>1330-20-7</td>
<td>&gt;= 1 - &lt; 10</td>
</tr>
<tr>
<td>Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)</td>
<td>64742-82-1</td>
<td>&gt;= 1 - &lt; 10</td>
</tr>
<tr>
<td>bis[2-[2-(1-methylethyl)-3-oxazolidinyl]ethyl]hexane-1,2-diylbiscarbamate</td>
<td>59719-67-4</td>
<td>&gt;= 1 - &lt; 10</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>&gt;= 1 - &lt; 10</td>
</tr>
<tr>
<td>reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight)</td>
<td>25068-38-6</td>
<td>&gt;= 1 - &lt; 10</td>
</tr>
</tbody>
</table>
**4. FIRST AID MEASURES**

**General advice**
- Move out of dangerous area.
- Consult a physician.
- Show this safety data sheet to the doctor in attendance.

**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**
- Immediately flush eye(s) with plenty of water.
- 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.
- 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
- Sensitising effects
- Allergic reactions
- Excessive lachrymation
- See Section 11 for more detailed information on health effects and symptoms.
- Causes mild skin irritation.
- May cause an allergic skin reaction.
- May be harmful if inhaled.

**Notes to physician**
- Treat symptomatically.

**5. FIREFIGHTING MEASURES**

**Suitable extinguishing media**
- Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing media:
- Water
- High volume water jet

Specific hazards during firefighting:
Do not use a solid water stream as it may scatter and spread fire.

Hazardous combustion products:
No hazardous combustion products are known

Specific extinguishing methods:
Use water spray to cool unopened containers.

Special protective equipment for firefighters:
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.
- Remove all sources of ignition.
- Deny access to unprotected persons.

Environmental precautions:
Prevent product from entering drains.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up:
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

7. HANDLING AND STORAGE

Advice on protection against fire and explosion:
Use explosion-proof equipment. Keep away from heat/sparks/open flames/hot surfaces. No smoking. Take precautionary measures against electrostatic discharges.

Advice on safe handling:
Do not breathe vapours 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 sensitisation 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.
Take precautionary measures against static discharge.
Open drum carefully as content may be under pressure.
Take necessary action to avoid static electricity discharge.
Conditions for safe storage:
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.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>xylene</td>
<td>1330-20-7</td>
<td>TWA</td>
<td>100 ppm / 435 mg/m3</td>
<td>TH OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>100 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>150 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td>ethylbenzene</td>
<td>100-41-4</td>
<td>TWA</td>
<td>20 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>125 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Hydrocarbons, C9, aromatics</td>
<td>64742-95-6</td>
<td>TWA</td>
<td>200 mg/m3 (total hydrocarbon vapor)</td>
<td>ACGIH</td>
</tr>
<tr>
<td>Quartz (SiO2) &lt;5µm</td>
<td>14808-60-7</td>
<td>TWA (Total dust)</td>
<td>30 mg/m3 / %SiO2+2</td>
<td>TH OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable dust)</td>
<td>10 mg/m3 / %SiO2+2</td>
<td>TH OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable dust)</td>
<td>250 mppcf / %SiO2+5</td>
<td>TH OEL</td>
</tr>
</tbody>
</table>
| Further information: Mppcf is million particles per 1 cubic foot
| 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate | 4098-71-9    | TWA (Respirable fraction)     | 0.025 mg/m3 (Silica)                          | ACGIH   |
| dibutyltin dilaurate                            | 77-58-7       | TWA                           | 0.1 mg/m3 (Tin)                               | ACGIH   |
|                                                 |               | STEL                          | 0.2 mg/m3 (Tin)                               | ACGIH   |

Personal protective equipment

Respiratory protection:
Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/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

: Handle in accordance with good industrial hygiene and safety practice.

When using do not eat or drink.

When using do not smoke.

Wash hands before breaks and at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

: liquid

Colour

: various

Odour

: characteristic

Odour Threshold

: No data available

pH

: No data available

Melting point/range / Freezing point

: No data available

Boiling point/boiling range

: No data available

Flash point

: ca. 49 °C (120 °F)

Method: closed cup

Evaporation rate

: No data available

Flammability

: No data available

Upper explosion limit

: 7 %(V)

Lower explosion limit

: 1 %(V)

Vapour pressure

: 7.9993 hPa (6.000 mmHg)

Relative vapour density

: No data available

Density

: ca. 1.63 g/cm3 (20 °C (68 °F) ())

Solubility(ies)

Water solubility

: insoluble
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: ca. 235 °C (455 °F)
Decomposition temperature: No data available
Viscosity
  Viscosity, dynamic: ca. 3,000 mPa.s (20 °C)
  Viscosity, kinematic: > 20.5 mm2/s (40 °C)
Molecular weight: No data available

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. Vapours may form explosive mixture with air.
Conditions to avoid: Heat, flames and sparks.
Incompatible materials: No data available
Hazardous decomposition products: No decomposition if stored and applied as directed.

11. TOXICOLOGICAL INFORMATION

Acute toxicity
May be harmful if inhaled.

Components:

bis[2-[2-(1-methylethyl)-3-oxazolidinyl]ethyl] hexane-1,2-diylbiscarbamate:
  Acute oral toxicity: LD50 Oral (Rat): > 5,000 mg/kg
  Acute dermal toxicity: LD50 Dermal (Rabbit): > 2,000 mg/kg

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700):
  Acute oral toxicity: LD50 Oral (Rat): > 5,000 mg/kg
  Acute dermal toxicity: LD50 Dermal (Rabbit): > 20,000 mg/kg

Hydrocarbons, C9, aromatics:
  Acute oral toxicity: LD50 Oral (Rat): > 2,000 mg/kg
  Acute dermal toxicity: LD50 Dermal (Rabbit): > 2,000 mg/kg

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate:
  Acute oral toxicity: LD50 Oral (Rat): 4,814 mg/kg
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Acute inhalation toxicity: LC50 (Rat): 0.031 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity: LD50 Dermal (Rat): > 7,000 mg/kg

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether:
Acute oral toxicity: LD50 Oral (Rat): > 5,000 mg/kg

Acute inhalation toxicity: LC50 (Rat): 3,466 mg/l
Exposure time: 4 h

Acute dermal toxicity: LD50 Dermal (Rabbit): 6,000 mg/kg

dibutyltin dilaurate:
Acute oral toxicity: LD50 Oral (Rat): 2,071 mg/kg

Skin corrosion/irritation
Causes mild skin irritation.

Serious eye damage/eye irritation
Not classified based on available information.

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

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

bis[2-[2-(1-methylethyl)-3-oxazolidinyl]ethyl] hexane-1,2-diylbiscarbamate:
Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 87.1 mg/l
Exposure time: 48 h

Toxicity to algae: EC50 (Scenedesmus capricornutum (fresh water algae)): 18.6 mg/l
Exposure time: 72 h
reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700):

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxicity to fish</strong></td>
<td>LC50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/l</td>
</tr>
<tr>
<td>Exposure time</td>
<td>96 h</td>
</tr>
<tr>
<td><strong>Toxicity to daphnia and other aquatic invertebrates</strong></td>
<td>EC50 (Daphnia magna (Water flea)): 1.8 mg/l</td>
</tr>
<tr>
<td>Exposure time</td>
<td>48 h</td>
</tr>
</tbody>
</table>

**Hydrocarbons, C9, aromatics:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxicity to algae</strong></td>
<td>(Pseudokirchneriella subcapitata (green algae)): 2.6 - 2.9 mg/l</td>
</tr>
<tr>
<td>Exposure time</td>
<td>72 h</td>
</tr>
</tbody>
</table>

**dibutyltin dilaurate:**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Toxicity to fish</strong></td>
<td>LC50 (Fish): 3.1 mg/l</td>
</tr>
<tr>
<td>Exposure time</td>
<td>96 h</td>
</tr>
<tr>
<td><strong>Toxicity to daphnia and other aquatic invertebrates</strong></td>
<td>EC50 (Daphnia (water flea)): 1 mg/l</td>
</tr>
<tr>
<td>Exposure time</td>
<td>48 h</td>
</tr>
<tr>
<td><strong>Toxicity to algae</strong></td>
<td>EC50 (Selenastrum capricornutum (green algae)): 1 - 10 mg/l</td>
</tr>
<tr>
<td>Exposure time</td>
<td>72 h</td>
</tr>
</tbody>
</table>

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**Other adverse effects**

**Product:**

| Additional ecological information              | An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects. |

13. DISPOSAL CONSIDERATIONS

**Disposal methods**

**Waste from residues**

- The product should not be allowed to enter drains, water courses or the soil.
- Do not contaminate ponds, waterways or ditches with chemical or used container.
- Send to a licensed waste management company.

**Contaminated packaging**

- Empty remaining contents.
- Dispose of as unused product.
- Do not re-use empty containers.
- Do not burn, or use a cutting torch on, the empty drum.
14. TRANSPORT INFORMATION

International Regulation
ADR
Exempted according to 2.2.3.1.5 (Viscous substance exemption)

UNRTDG
UN number : UN 1263
Proper shipping name : PAINT
Class : 3
Packing group : III
Labels : 3

IATA-DGR
UN/ID No. : UN 1263
Proper shipping name : Paint
Class : 3
Packing group : III
Labels : 3
Packing instruction (cargo aircraft) : 366
Packing instruction (passenger aircraft) : 355

IMDG-Code
UN number : UN 1263
Proper shipping name : PAINT
Class : 3
Packing group : III
Labels : 3
EmS Code : F-E, S-E
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture
International Chemical Weapons Convention (CWC) : Not applicable
Schedules of Toxic Chemicals and Precursors : Not applicable
Hazardous Substance Act B.E. 2535 : Not applicable
Emergency Decree on Controlling the Use of Volatile Substances B.E. 2533 : xylene
Notification of Ministry of Interior on Working Safety Relating to Hazardous Chemicals B.E. 2534 : xylene
reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700)
16. OTHER INFORMATION

Date format : yyyy/mm/dd

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.