SECTION 1. IDENTIFICATION

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

Manufacturer or supplier’s details
Company name: Sika Canada Inc.
601, avenue Delmar
Pointe-Claire, QC H9R 4A9
Canada
www.sika.ca

Telephone: (514) 697-2610 / 1 (800) 933-7452
Telefax: (514) 694-2792
Health and Safety Services’s e-mail address: ehs@ca.sika.com

Emergency telephone: CANUTEC (collect) (613) 996-6666 (24 hours)

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

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification
Acute toxicity (Oral): Category 4
Skin corrosion: Category 1A
Serious eye damage: Category 1
Skin sensitization: Category 1
Reproductive toxicity: Category 2

GHS label elements
Hazard pictograms: 

Signal Word: Danger

Hazard Statements: H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
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/ protective clothing/ eye protection/ face protection.

**Response:**
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P308 + P313 IF exposed or concerned: Get medical advice/attention.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P362 + P364 Take off contaminated clothing and wash it 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.

**Other hazards**

None known.

**Supplemental information**

If product is in liquid or paste form, physical or health hazards listed related to dust are not considered significant. However, product may contain substances that could be potential hazards if caused to become airborne due to grinding, sanding or other abrasive processes.
SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenol, 4-nonyl-, branched</td>
<td>84852-15-3</td>
<td>&gt;= 50 - &lt; 60</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
<td>100-51-6</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
<tr>
<td>m-phenylenebis(methylamine)</td>
<td>1477-55-0</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>2,4,6-tris(dimethylaminomethyl)phenol</td>
<td>90-72-2</td>
<td>&gt;= 2 - &lt; 5</td>
</tr>
<tr>
<td>P-tert-butylphenol (PTBP)</td>
<td>98-54-4</td>
<td>&gt;= 2 - &lt; 5</td>
</tr>
<tr>
<td>Trimethylhexamethylenediamine</td>
<td>25620-58-0</td>
<td>&gt;= 0 - &lt; 1</td>
</tr>
</tbody>
</table>

SECTION 4. FIRST AID MEASURES

**General advice**
- Move out of dangerous area.
- Consult a physician.
- Show this material 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.
- Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

**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.
- Take victim immediately to hospital.

**Most important symptoms and effects, both acute and delayed**
- Health injuries may be delayed.
- Corrosive effects
- Sensitizing effects
- Gastrointestinal discomfort
- Allergic reactions
- Dermatitis
- See Section 11 for more detailed information on health effects and symptoms.
Harmful if swallowed.
May cause an allergic skin reaction.
Causes serious eye damage.
Suspected of damaging fertility or the unborn child.
Causes severe burns.

Notes to physician: Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

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

Further information: 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.

SECTION 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.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Advice on safe handling: 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 ap-
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.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

<table>
<thead>
<tr>
<th>Ingredients</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>m-phenylenebis(methylamine)</td>
<td>1477-55-0</td>
<td>(c)</td>
<td>0.1 mg/m³</td>
<td>CA AB OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.1 mg/m³</td>
<td>CA BC OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.1 mg/m³</td>
<td>CA QC OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>0.1 mg/m³</td>
<td>ACGIH</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.

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

Remarks:

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 concent-
tration 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.

SECTION 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>pH</td>
<td>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>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 100 °C (&gt; 212 °F)</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>19.9983 hpa (15.000 mmHg)</td>
</tr>
<tr>
<td>Relative vapor density</td>
<td>No data available</td>
</tr>
<tr>
<td>Density</td>
<td>0.96 g/cm³ (23 °C (73 °F))</td>
</tr>
<tr>
<td>Solubility(ies)</td>
<td></td>
</tr>
<tr>
<td>Water solubility</td>
<td>soluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
</tbody>
</table>
Viscosity
Viscosity, dynamic : No data available
Viscosity, kinematic : > 20.5 mm²/s (40 °C)
Explosive properties : No data available
Molecular weight : No data available

SECTION 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
No decomposition if stored and applied as directed.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity
Harmful if swallowed.

Product:
Acute oral toxicity : Acute toxicity estimate: 711.59 mg/kg
Method: Calculation method
Acute inhalation toxicity : Acute toxicity estimate: 7.03 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method
Acute dermal toxicity : Acute toxicity estimate: 3,909 mg/kg
Method: Calculation method

Ingredients:
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
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 (Rat): > 3,100 mg/kg

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

Skin corrosion/irritation
Causes severe burns.

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.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.
IARC Not applicable
NTP Not applicable

Reproductive toxicity
Suspected of damaging fertility or the unborn child.

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.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Ingredients:
Phenol, 4-nonyl-, branched:
M-Factor (Acute aquatic toxicity): 10
M-Factor (Chronic aquatic toxicity): 10

**Benzyl alcohol:**
- **Toxicity to fish:** LC50 (Fish): > 100 mg/l
  - Exposure time: 96 h
- **Toxicity to daphnia and other aquatic invertebrates:** EC50 (Daphnia magna (Water flea)): > 100 mg/l
  - Exposure time: 48 h

**m-phenylenebis(methylamine):**
- **Toxicity to fish:** LC50 (Oryzias latipes (Japanese medaka)): > 10 - 100 mg/l
  - Exposure time: 96 h
- **Toxicity to daphnia and other aquatic invertebrates:** EC50 (Daphnia magna (Water flea)): > 10 - 100 mg/l
  - Exposure time: 48 h

**2,4,6-tris(dimethylaminomethyl)phenol:**
- **Toxicity to algae:** EC50 (Scenedesmus capricornutum (fresh water algae)): > 10 - 100 mg/l
  - Exposure time: 72 h

### Persistence and degradability
No data available

### Bioaccumulative potential
No data available

### Mobility in soil
No data available

### Other adverse effects
**Product:**
- Additional ecological 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.

### SECTION 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.
SECTION 14. TRANSPORT INFORMATION

**Domestic regulation**

**TDG (road/train)**
- **UN number**: UN 3267
- **Proper shipping name**: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.
- **Class**: 8
- **Packing group**: II
- **Labels**: 8

**International Regulations**

**IATA-DGR**
- **UN/ID No.**: UN 3267
- **Proper shipping name**: Corrosive liquid, basic, organic, n.o.s.
  (4-nonylphenol, branched, m-phenylenebis(methylamine))
- **Class**: 8
- **Packing group**: II
- **Labels**: Corrosives
- **Packing instruction (cargo aircraft)**: 855
- **Packing instruction (passenger aircraft)**: 851

**IMDG-Code**
- **UN number**: UN 3267
- **Proper shipping name**: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.
  (4-nonylphenol, branched, m-phenylenebis(methylamine))
- **Class**: 8
- **Packing group**: II
- **Labels**: 8
- **EmS Code**: F-A, S-B
- **Marine pollutant**: yes

*Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code*

Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

**Canadian lists**

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

**Revision Date**: 12/23/2016
SAFETY DATA SHEET

Sikadur®-22 Lo-Mod FS  Part B

Prepared by : R & D of Sika Canada Inc.

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Full text of other abbreviations
ADR Accord européen relatif au transport international des marchandises Dangereuses par Route
CAS Chemical Abstracts Service
DNEL Derived no-effect level
EC50 Half maximal effective concentration
GHS Globally Harmonized System
IATA International Air Transport Association
IMDG International Maritime Code for Dangerous Goods
LD50 Median lethal dosis (the amount of a material, given all at once, which causes the death of 50% (one half) of a group of test animals)
LC50 Median lethal concentration (concentrations of the chemical in air that kills 50% of the test animals during the observation period)
MARPOL International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978
OEL Occupational Exposure Limit
PBT Persistent, bioaccumulative and toxic
PNEC Predicted no effect concentration
SVHC Substances of Very High Concern
vPvB Very persistent and very bioaccumulative

CA / Z8