1. Identification

Product name : Sarnacol® 2170 VC Membrane Adhesive

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 2 H225: Highly flammable liquid and vapor.
Eye irritation , Category 2A H319: Causes serious eye irritation.
Reproductive toxicity , Category 2 H361: Suspected of damaging fertility or the unborn child.
Specific target organ systemic toxicity - single exposure , Category 3, Central nervous system
H336: May cause drowsiness or dizziness.

GHS Label element

Hazard pictograms :

Signal Word : Danger

Hazard Statements :
H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.
H361 Suspected of damaging fertility or the unborn child.
H336 May cause drowsiness or dizziness.

Precautionary 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.
P233 Keep container tightly closed.
2. Response:
P280 Wear protective gloves/ eye protection/ face protection.
P281 Use personal protective equipment as required.

Response:
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
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.
P337 + P313 IF eye irritation persists: Get medical advice/attention.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
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>acetone</td>
<td>67-64-1</td>
<td>&gt;= 25 - &lt; 50 %</td>
</tr>
<tr>
<td>tert-butyl acetate</td>
<td>540-88-5</td>
<td>&gt;= 25 - &lt; 50 %</td>
</tr>
<tr>
<td>Toluene</td>
<td>108-88-3</td>
<td>&gt;= 0.0 - &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

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inhaled</td>
<td>Move to fresh air. Consult a physician after significant exposure.</td>
</tr>
<tr>
<td>In case of skin contact</td>
<td>Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. If symptoms persist, call a physician.</td>
</tr>
<tr>
<td>In case of eye contact</td>
<td>Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.</td>
</tr>
<tr>
<td>If swallowed</td>
<td>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.</td>
</tr>
</tbody>
</table>

#### Most important symptoms and effects, both acute and delayed
- Respiratory disorder
- Excessive lachrymation
- Loss of balance
- Vertigo
- See Section 11 for more detailed information on health effects and symptoms.

**Irritant 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

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>Alcohol-resistant foam</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Carbon dioxide (CO2)</td>
</tr>
<tr>
<td></td>
<td>Dry chemical</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Unsuitable extinguishing media</th>
<th>Water</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>High volume water jet</td>
</tr>
</tbody>
</table>

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

| Specific extinguishing methods | Use water spray to cool unopened containers. 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. |
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. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

Environmental precautions: Prevent product from entering drains. 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: 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 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. 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 (which might cause ignition of organic vapors). Follow standard hygiene measures when handling chemical products.

Conditions for safe storage: Store in original container. Store in cool place. 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>acetone</td>
<td>67-64-1</td>
<td>ACGIH</td>
<td>TWA</td>
<td>500 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.

9. Physical and chemical properties

Appearance: viscous
Color: milky off-white
Odor: acetone-like
Odor Threshold: no data available
Flash point: -4 °F (-20 °C)
Ignition temperature: no data available
Decomposition temperature: no data available
Lower explosion limit (Vol%): 2.5 % (V)
Upper explosion limit (Vol%): 13 % (V)
Flammability (solid, gas): no data available
Oxidizing properties: no data available
Autoignition temperature: no data available
pH: Note: not applicable
Melting point/range / Freezing point: no data available
Boiling point/boiling range: ca. 133 °F (56 °C)
Vapor pressure: 1.747 mmHg (2.3298 hpa)
Density: ca.0.88 g/cm³ at 73 °F (23 °C)
Water solubility: Note: insoluble
Partition coefficient: n-octanol/water: no data available
Viscosity, dynamic: no data available
Viscosity, kinematic: ca. > 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: 348 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.
Vapors may form explosive mixture with air.
Conditions to avoid: Heat, flames and sparks.
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

Skin corrosion/irritation
Product
no data available

Serious eye damage/eye irritation
Product
Causes serious eye irritation.
Respiratory or skin sensitization

**Product**
no data available

Germ cell mutagenicity

**Product**
Mutagenicity : no data available

Carcinogenicity

**Product**
Carcinogenicity : no data available

IARC not applicable
NTP not applicable

Reproductive Toxicity/Fertility

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

Reproductive Toxicity/Development/Teratogenicity

**Product**
Teratogenicity : no data available

STOT-single exposure

**Product**
Assessment: May cause drowsiness or dizziness.

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.

**Product**
Assessment: no data available

Aspiration toxicity

**Product**
no data available

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:

acetone 67-64-1  
**Toxicity to fish:**  
| LC50 | Species: Fish | Dose: > 5,000 mg/l | Exposure time: 96 h |

**Toxicity to daphnia and other aquatic invertebrates:**  
| EC50 | Species: Daphnia | Dose: 12,700 mg/l | Exposure time: 48 h |

**Toxicity to algae:**  
| ErC50 | Species: Pseudokirchneriella subcapitata (green algae) | Dose: > 530 mg/l | Exposure time: 96 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**

| UN number | 1133 |
| Description of the goods | Adhesives |
| Class | 3 |
| Packing group | II |
| Labels | 3 |
| Emergency Response | 128 |
| Guidebook Number |

**IATA**

| UN number | 1133 |
| Description of the goods | Adhesives |
| Class | 3 |
| Packing group | II |
| Labels | 3 |
| Packing instruction (cargo aircraft) | 364 |
| Packing instruction (passenger aircraft) | 353 |
10 / 12

Packing instruction Y341
(passenger aircraft)

IMDG
UN number 1133
Description of the goods ADHESIVES
Class 3
Packing group II
Labels 3
EmS Number 1 F-E
EmS Number 2 S-D

Marine pollutant no

DOT: For Limited Quantity exceptions reference 49 CFR 173.150 (b)
IMDG: For Limited Quantity special provisions reference IMDG Code Chapter 3.4

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
Acute Health Hazard
Chronic 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
SARA 313: This material does not contain any chemical
components with known CAS numbers that exceed the
threshold (De Minimis) reporting levels established by SARA
Title III, Section 313.

Clean Air Act
Ozone-Depletion Potential
Warning: Manufactured with carbon tetrachloride, Carbon Tetrachloride, a substance which harms public health and environment by destroying ozone in the upper atmosphere.

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 12 (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).

Clean Water Act
This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307.

California Prop 65
WARNING! This product contains a chemical known in the State of California to cause cancer.
WARNING: This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

16. Other information

HMIS Classification

<table>
<thead>
<tr>
<th>Category</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Flammability</td>
<td>3</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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