Section 1 - PRODUCT AND COMPANY IDENTIFICATION

Material Name: Flexible DASH Dual Cartridge Part B
Synonyms: Polyol Blend
Chemical Family: Polyol Blend
Product Use: Commercial Roofing Adhesive
Restrictions on Use: Professional use only

Manufacturer Information
Versico
1285 Ritner Highway
Carlisle, PA 17013
USA
Phone: +1-800-992-7663
Emergency Phone #: +1-800-424-9300 (CHEMTREC)

Section 2 - HAZARDS IDENTIFICATION

Classification in accordance with paragraph (d) of 29 CFR 1910.1200.
None needed according to classification criteria

GHS Label Elements
Symbol(s)
None needed according to classification criteria
Signal Word
None needed according to classification criteria
Hazard Statement(s)
None needed according to classification criteria
Precautionary Statement(s)
Prevention
None needed according to classification criteria
Response
None needed according to classification criteria
Storage
None needed according to classification criteria
Disposal
Dispose of contents/container in accordance with local/regional/national/international regulations
Other Hazards
No additional information available.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS</th>
<th>Component Name</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>25265-71-8</td>
<td>Dipropylene glycol</td>
<td>5-10</td>
</tr>
<tr>
<td>13674-84-5</td>
<td>2-Propanol, 1-chloro-, phosphate (3:1)</td>
<td>10-20</td>
</tr>
<tr>
<td>280-57-9</td>
<td>1,4-Diazabicyclo[2.2.2]octane</td>
<td>0.1-1</td>
</tr>
<tr>
<td>108-01-0</td>
<td>2-(Dimethylamino)ethanol</td>
<td>0.1-1</td>
</tr>
</tbody>
</table>

Section 4 - FIRST AID MEASURES

Description of Necessary Measures
IF exposed or concerned: Get medical advice/attention.

Inhalation
Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician.

Skin
Wash with plenty of soap and water. If skin irritation occurs, get medical advice/attention.

Eyes
Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

Ingestion
Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell.

Indication of any immediate medical attention and special treatment needed
Treat symptomatically and supportively.

Most Important Symptoms/Effects

Acute
No information on significant adverse effects.

Delayed
No information on significant adverse effects.
Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media
regular dry chemical, carbon dioxide, water, regular foam

Unsuitable Extinguishing Media
None known.

Special Hazards Arising from the Chemical
Closed containers may rupture violently when heated.

Hazardous Combustion Products
Oxides of carbon, oxides of phosphorus, hydrogen halides

Special Protective Equipment and Precautions for Firefighters
Wear self-contained breathing apparatus with a full facepiece and protective clothing.

Fire Fighting Measures
Move container from fire area if it can be done without risk. Cool containers with water spray until well after the fire is out.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures
Wear personal protective clothing and equipment, see Section 8.

Methods and Materials for Containment and Cleaning Up
Keep unnecessary people away, isolate hazard area and deny entry. Ventilate closed spaces before entering. Do not touch or walk through spilled material. Stop leak if possible without personal risk. Small spills: Absorb with earth, sand or other non-combustible material and transfer to container. Large spills: Dike for later disposal. Eliminate all sources of ignition. Do not flush into sanitary sewer systems, drains or surface water.

Environmental Precautions
Avoid release to the environment.

Section 7 - HANDLING AND STORAGE

Precautions for Safe Handling
Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product. Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Use only in well ventilated areas. Wear protective gloves/clothing and eye/face protection. Wash contaminated clothing before reuse.
Safety Data Sheet

Material Name: Flexible DASH Dual Cartridge Part B

Conditions for Safe Storage, Including any Incompatibilities
None needed according to classification criteria
Store between 65°F-85°F (18°C-30°C). Store in a dry place. Keep away from incompatible materials.

Incompatible Materials
Strong oxidizing materials, isocyanates, strong acids, strong bases

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Component Exposure Limits
ACGIH, NIOSH, EU, OSHA (US) and Mexico have not developed exposure limits for any of this product's components

Biological limit value
There are no biological limit values for any of this product's components.

Engineering Controls
Provide local exhaust ventilation system. Ensure compliance with applicable exposure limits.

Individual Protection Measures, such as Personal Protective Equipment

Eye/face protection
Wear splash resistant safety goggles with a faceshield. Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

Skin Protection
Wear chemical resistant clothing and rubber boots when potential for contact with the material exists. Thoroughly clean and dry contaminated clothing and shoes before reuse.

Respiratory Protection
In case of inadequate ventilation wear respiratory protection.

Glove Recommendations
Wear appropriate chemical resistant gloves.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance</th>
<th>Physical State</th>
<th>Odor</th>
<th>pH</th>
<th>Melting Point</th>
<th>Boiling Point</th>
<th>Freezing point</th>
<th>Evaporation Rate</th>
<th>Boiling Point Range</th>
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</thead>
<tbody>
<tr>
<td>blue liquid</td>
<td>liquid</td>
<td>musty, amine</td>
<td>Not available</td>
<td>Not available</td>
<td>Boiling Point</td>
<td>Not available</td>
<td>Evaporation Rate</td>
<td>Not available</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Color</td>
<td>pH</td>
<td></td>
<td>&gt;100 °C</td>
<td>slower than ether</td>
<td></td>
<td></td>
</tr>
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</table>
Safety Data Sheet

Material Name: Flexible DASH Dual Cartridge Part B

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<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Autoignition</td>
<td>Not available</td>
</tr>
<tr>
<td>Flash Point</td>
<td>&gt;201 °F [(CC)]</td>
</tr>
<tr>
<td>Lower Explosive Limit</td>
<td>Not available</td>
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<tr>
<td>Decomposition</td>
<td>Not available</td>
</tr>
<tr>
<td>Upper Explosive Limit</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not available</td>
</tr>
<tr>
<td>Vapor Density (air=1)</td>
<td>&gt;1</td>
</tr>
<tr>
<td>Specific Gravity (water=1)</td>
<td>1.1058</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>soluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>250 cps</td>
</tr>
<tr>
<td>Solubility (Other)</td>
<td>Not available</td>
</tr>
<tr>
<td>Density</td>
<td>9.23 lb/gal at @ 25°C</td>
</tr>
<tr>
<td>Physical Form</td>
<td>liquid</td>
</tr>
<tr>
<td>VOC</td>
<td>0 g/l</td>
</tr>
</tbody>
</table>

Other Information
No additional information available.

---

**Section 10 - STABILITY AND REACTIVITY**

**Reactivity**
No reactivity hazard is expected.

**Chemical Stability**
Stable at normal temperatures and pressure.

**Possibility of Hazardous Reactions**
Hazardous polymerization will not occur.

**Conditions to Avoid**
Prolonged heating above 160°C or storage below 5°C. Avoid heat, flames, sparks and other sources of ignition.

**Incompatible Materials**
Strong acids, strong bases, strong oxidizing materials, isocyanates

**Hazardous decomposition products**
Oxides of hydrogen, oxides of phosphorus, hydrogen halides

---

**Section 11 - TOXICOLOGICAL INFORMATION**

**Information on Likely Routes of Exposure**
Inhalation
Vapor or mist may cause respiratory tract irritation.

Skin Contact
May cause mild skin irritation.

Eye Contact
May cause mild eye irritation.

Ingestion
May cause gastrointestinal disturbances, nausea, vomiting, and diarrhea.

Acute and Chronic Toxicity

Component Analysis - LD50/LC50
The components of this material have been reviewed in various sources and the following selected endpoints are published:

Dipropylene glycol (25265-71-8)
   Oral LD50 Rat 14800 mg/kg
   Dermal LD50 Rabbit >5000 mg/kg

2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)
   Oral LD50 Rat 630 mg/kg
   Dermal LD50 Rabbit >2000 mg/kg
   Inhalation LC50 Rat >7 mg/L 4 h

1,4-Diazabicyclo[2.2.2]octane (280-57-9)
   Oral LD50 Rat 1700 mg/kg
   Dermal LD50 Rabbit 3200 mg/kg

2-(Dimethylamino)ethanol (108-01-0)
   Oral LD50 Rat 1803 mg/kg
   Dermal LD50 Rabbit 1220 mg/kg
   Inhalation LC50 Rat 1641 ppm 4 h

Water (7732-18-5)
   Oral LD50 Rat >90 mL/kg

Immediate Effects
No information on significant adverse effects.

Delayed Effects
No information on significant adverse effects.

Irritation/Corrosivity Data
May cause respiratory tract irritation, skin irritation, and eye irritation.

Respiratory Sensitization
No information available for the product.

Dermal Sensitization
No information available for the product.
### Component Carcinogenicity
None of this product's components are listed by ACGIH, IARC, NTP, DFG or OSHA

### Germ Cell Mutagenicity
No information available for the product.

### Reproductive Toxicity
No information available for the product.

### Specific Target Organ Toxicity - Single Exposure
No target organs identified.

### Specific Target Organ Toxicity - Repeated Exposure
No target organs identified.

### Aspiration hazard
No information available for the product.

### Medical Conditions Aggravated by Exposure
None reported.

### Additional Data
No additional information available.

---

**Section 12 - ECOLOGICAL INFORMATION**

#### Ecotoxicity
Avoid release to the environment.

#### Component Analysis - Aquatic Toxicity

<table>
<thead>
<tr>
<th>Component</th>
<th>EC50/EC10 Values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2-Propanol, 1-chloro-, phosphate (3:1)</strong></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 96 h Brachydanio rerio 56.2 mg/L [static]; LC50 96 h Pimephales promelas 98 mg/L [static]; LC50 96 h Poecilia reticulata 30 mg/L [static]</td>
</tr>
<tr>
<td>Algae</td>
<td>EC50 72 h Desmodesmus subspicatus 45 mg/L IUCLID; EC50 96 h Pseudokirchneriella subcapitata 4 mg/L IUCLID</td>
</tr>
<tr>
<td>Invertebrate</td>
<td>EC50 48 h Daphnia magna 63 mg/L IUCLID</td>
</tr>
<tr>
<td><strong>1,4-Diazabicyclo[2.2.2]octane</strong></td>
<td></td>
</tr>
<tr>
<td>Fish</td>
<td>LC50 96 h Pimephales promelas 1510 - 1980 mg/L [flow-through]</td>
</tr>
<tr>
<td></td>
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</tbody>
</table>


### Persistence and Degradability
No information available for the product.

### Bioaccumulative Potential
No information available for the product.

### Mobility
No information available for the product.

### Bioconcentration
No information available for the product.

### Other Toxicity
No additional information available.

---

**Section 13 - DISPOSAL CONSIDERATIONS**

**Disposal Methods**
Dispose in accordance with all applicable regulations.

---

**Section 14 - TRANSPORT INFORMATION**

**US DOT Information:**
UN/NA #: Not regulated.

**IATA Information:**
No Classification assigned.

**TDG Information:**
UN#: Not regulated.

---

**Section 15 - REGULATORY INFORMATION**

**U.S. Federal Regulations**
Safety Data Sheet

Material Name: Flexible DASH Dual Cartridge Part B

None of this product's components are listed under SARA Sections 302/304 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), TSCA 12(b), or require an OSHA process safety plan.

SARA Section 311/312 (40 CFR 370 Subparts B and C)
Acute Health: Yes Chronic Health: Yes Fire: No Pressure: No Reactivity: No

U.S. State Regulations
The following components appear on one or more of the following state hazardous substances lists:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>CA</th>
<th>MA</th>
<th>MN</th>
<th>NJ</th>
<th>PA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dipropylene glycol</td>
<td>25265-71-8</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>2-(Dimethylamino)ethanol</td>
<td>108-01-0</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Not listed under California Proposition 65

Canadian WHMIS Ingredient Disclosure List (IDL)
Components of this material have been checked against the Canadian WHMIS Ingredients Disclosure List. The List is composed of chemicals which must be identified on MSDSs if they are included in products which meet WHMIS criteria specified in the Controlled Products Regulations and are present above the threshold limits listed on the IDL.

| 1,4-Diazabicyclo[2.2.2]octane      | 280-57-9 |
|                                    | 1 %      |

WHMIS Classification
D2A, D2B.

Component Analysis - Inventory
Oxirane, methyl-, polymer with oxirane (9003-11-6)

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<thead>
<tr>
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<tbody>
<tr>
<td>Yes</td>
<td>DSL</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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Dipropylene glycol (25265-71-8)

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<tbody>
<tr>
<td>Yes</td>
<td>DSL</td>
<td>EIN</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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2-Propanol, 1-chloro-, phosphate (3:1) (13674-84-5)

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<tbody>
<tr>
<td>Yes</td>
<td>DSL</td>
<td>EIN</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
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</table>
Siloxanes and Silicones, dimethyl, 3-hydroxypropyl methyl, ethoxylated propoxylated (68937-55-3)

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<tbody>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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</table>

Oxirane, methyl-, polymer with oxirane, mono-2-propenyl ether (9041-33-2)

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<td>Yes</td>
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1,4-Diazabicyclo[2.2.2]octane (280-57-9)

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<td>DSL</td>
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2-(Dimethylamino)ethanol (108-01-0)

<table>
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Water (7732-18-5)

<table>
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<tbody>
<tr>
<td>Yes</td>
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<td>EIN</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

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**Section 16 - OTHER INFORMATION**

**NFPA Ratings**

Health: 2 Fire: 1 Reactivity: 0  
Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe

**Summary of Changes**

New 6/20/2016
Safety Data Sheet

Material Name: Flexible DASH Dual Cartridge Part B

Product #: 326735

Key / Legend
ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CLP - Classification, Labelling, and Packaging; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSD - Dangerous Substance Directive; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LLV - Level Limit Value; LOLI - List Of Lists™ - ChemADVISOR’s Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; REACH - Registration, Evaluation, Authorisation, and restriction of Chemicals; RID - European Rail Transport; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States.

Other Information

Disclaimer:
The information contained herein is based upon data and information available to us, and reflects our best professional judgment. This product may be formulated in part with components purchased from other companies. No warranty of merchantability, fitness for any use, or any other warranty is expressed or implied regarding the accuracy of such data or information. The results to be obtained from the use thereof, or that any such use does not infringe any patent, since the information contained herein may be applied under conditions of use beyond our control and with which we may be unfamiliar, we do not assume responsibility for the results of such application. This information is furnished upon the condition that the person receiving it shall make his own determination of the suitability of the material for his particular use.