

## Safety Data Sheet

Material Name: Flexible DASH Dual Tank Adhesive Part B

Product #328044

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### Section 1 - PRODUCT AND COMPANY IDENTIFICATION

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**Material Name**

Flexible DASH Dual Tank Adhesive Part B

**Synonyms**

Low pressure polyurethane foam adhesive

**Product Use**

Membrane and Insulation Adhesive

**Restrictions on Use**

For industrial use only.

**Manufacturer Information**

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

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### Section 2 - HAZARDS IDENTIFICATION

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**Classification of substance or mixture**

Product definition: Mixture  
Classification: Gases Under Pressure- Compressed Gas  
Skin Irritation- Category 2  
Eye Irritation- Category 2A

**Label elements**

According to Regulation 2012 OSHA Hazard Communication Standard: 29 CFR Part 1910.1200

**Hazard Symbols:**



**Signal Word: WARNING**

**Hazard Statements:**



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Contains gas under pressure; may explode if heated.  
Causes skin irritation.  
Causes serious eye irritation.

### Prevention:

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Pressurized container: Do not pierce or burn, even after use.  
Do not breathe dust, gas, mist, or vapours.  
Wash hands and other skin areas exposed to material thoroughly after handling.  
Use outdoors or in a well-ventilated area.  
Wear protective gloves, protective clothing and eye protection.

### Response:

IF ON SKIN: Wash with plenty of soap and water.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Specific treatment: Seek immediate medical advice. Refer to product label and Section 4 of this SDS.  
If skin irritation or rash occurs: Get medical attention.  
If eye irritation persists: Get medical attention.  
Take off contaminated clothing and wash before reuse.

### Storage:

Store locked up.  
Protect from sunlight. Store in a well-ventilated place.

### Disposal:

Dispose of contents/container in accordance with applicable local, regional, national, and international regulations.

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## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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**According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200**

This product does not contain any components classified as hazardous under the referenced regulation.

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

CAS	Component Name	Percent
811-97-2	1,1,1,2- Tetrafluoroethane	15-20
13674-84-5	tris(2-chloro-1-methylethyl)phosphate	3-5
108-01-0	2-dimethylaminoethanol	1.0-3.0



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280-57-9	triethylenediamine	0.1 -0.3
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### Section 4 - FIRST AID MEASURES

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#### **Inhalation**

If product vapors causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen. If respiratory arrest occurs, start artificial respiration by a trained individual. Loosen tight fitting clothing such as a jacket or tie. Seek medical attention immediately.

#### **Skin**

Flush skin with large amounts of water while removing contaminated clothing. Gently wipe product from skin with a damp cloth and continue rinsing for 15 minutes. Wash clothing before reuse. Call a physician if irritation persists.

#### **Eyes**

Immediately flush eyes with large amounts of water for at least 15 minutes, holding the eyes open with fingers and occasionally lifting the upper and lower lids. Use lukewarm water if possible. If present and easy to do, remove contact lenses. If irritation persists, get medical attention.

#### **Ingestion**

If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical advice/attention.

#### **Most Important Symptoms/Effects**

##### **Inhalation**

Mist or vapor may cause irritation of the nose, throat and respiratory tract. Symptoms may include sore throat, coughing, headache, nausea and shortness of breath. Inhalation of propellant may cause lightheadedness, headache and lethargy.

##### **Eye**

May cause eye irritation. Symptoms may include redness, swelling, stinging, and tearing. May cause temporary corneal injury. Product vapor may cause eye irritation with symptoms of burning and tearing.

##### **Skin**

May cause mild skin irritation. Symptoms may include localized redness and discomfort.

##### **Ingestion**

May cause gastrointestinal irritation: stomach distress, nausea, or vomiting. Repeated ingestion may be harmful.

##### **Chronic**

Pre-existing disorders of the skin and respiratory system may be aggravated by exposure to this product.



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**Note to physician**

If case of an accident or if you feel unwell, seek medical advice immediately (show label or SDS if possible).

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### Section 5 - FIRE FIGHTING MEASURES

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**Extinguishing Media**

**Suitable Extinguishing Media**

Use dry chemical, carbon dioxide, alcohol resistant foams and water spray.

**Unsuitable methods of extinction**

None

**Special Hazards Arising from the Chemical**

Cylinders may explode due to the buildup of pressure when exposed to extreme heat. Highly toxic gases may be generated by thermal decomposition or combustion. Overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed.

**Advice for firefighters**

Keep upwind of fire. Wear full fire-fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA). Use water spray to keep fire-exposed containers cool.

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### Section 6 - ACCIDENTAL RELEASE MEASURES

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**Personal Precautions, Protective Equipment and Emergency Procedures**

Wear personal protective equipment recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition. Ventilate the area.

**Methods and Materials for Containment and Cleaning Up**

Cover drains and contain spill. Cover spilled material with a large quantity of inert absorbent. Collect material and place into an approved, open-head metal container. Clean contaminated area with soap and water.

**Environmental Precautions**



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Avoid dispersal of spilled material or run-off and prevent contact with soil and entry into drains, sewers or waterways.

### Reference to other sections

For indications about waste treatment, see Section 13.

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## Section 7 - HANDLING AND STORAGE

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### Precautions for Safe Handling

Observe label precautions. Wear all appropriate protective equipment specified in Section 8. Keep containers closed when not in use.

### Protection against fire and explosion:

Contents under pressure. Exposure to high temperatures can cause containers to rupture or explode.

**Conditions for Safe Storage, Including any Incompatibilities** Store in a dry, well-ventilated area and away from incompatible materials (see Section 10.5). Storage temperature is 70-90°F (21-32°C).

Products stored below 70°F (21°C) or above 90°F (32°C) must be given adequate time to warm up/cool down. Do not expose the cylinders/kits to open flame or temperatures above 122°F (50°C); storage at elevated temperatures can cause the container to rupture. Excessive heat can cause premature aging of components resulting in a shorter shelf life. Protect unused product from freezing. Storage below 60°F (16°C) may affect foam quality if chemicals are not warmed to room temperature before using. Protect containers from physical abuse. Always store the containers in the upright position. **KEEP OUT OF REACH OF CHILDREN.**

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## Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

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<b>1,1,1,2 Tetrafluoroethane</b>	811-97-2
WEEL	1,000 ppm

### Engineering Controls:

Use local and general exhaust ventilation to control levels of exposure.

### Eye/face protection:

Wear protective goggles or safety glasses with side shields.

### Respiratory Protection:

Atmospheric levels should be maintained below the exposure guidelines. Use products only in a well-ventilated area. Engineering and administrative (work practices) controls should be implemented to protect the workers. If atmospheric levels are expected to exceed the exposure levels, use a NIOSH approved air purifying respirator equipped with an organic vapor cartridge and a particulate filter. If atmospheric levels exceed 10 times the TLV or PEL level for which an air-purifying respirator is effective, use a powered air purifying respirator (PAPR). The type of respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134). The odor and irritancy of this material is inadequate to warn of excessive exposure.

### Hand protection:



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Use chemically resistant gloves (i.e. Nitrile gloves). Nitrile/butadiene rubber, butyl rubber, polyethylene, PVC (vinyl), or neoprene gloves are also effective. Glove selection should take into account potential body reactions to certain materials and manufacturer's instructions for use. Break through time of selected gloves must be greater than the intended use period.

**Other Protective Equipment**

Use clothing that protects against dermal exposure. Appropriate protective clothing varies depending on the potential for exposure. To ensure proper skin protection, wear PPE in such a manner that no skin is exposed.

**Hygiene measures:**

An eye wash station or portable eye wash station should be in the area. Wash hands thoroughly after use, before eating, drinking or using the lavatory. Employees/Users should be educated and trained in the safe use and handling of this product.

### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<b>General physical form</b>	Clear to light yellow liquid. Forms an off-white to yellowish froth when released from the container		
<b>Odor</b>	Slight fluorocarbon and amine odor	<b>Physical State</b>	liquid
<b>Odor Threshold</b>	Not available	<b>Color</b>	Clear to light yellow
		<b>pH</b>	Not available
<b>Freezing point</b>	Not available	<b>Evaporation Rate</b>	Not available
<b>Boiling Point</b>	Propellant -26°C (-15°F), >93 °C (> 200°F) Resin	<b>Flammability (solid, gas)</b>	Not applicable
<b>Autoignition</b>	Not available	<b>Flash Point</b>	Approx. >93°C (200°F)
<b>Density ( 20 °C)</b>	Approx. 1.2 g/cm <sup>3</sup>	<b>Decomposition</b>	Not available
<b>Self Igniting</b>	Not self igniting	<b>Vapor Pressure( 40 °C)</b>	<1 mm Hg
<b>Vapor Density (air=1)</b>	N/A	<b>Specific Gravity (water=1)</b>	Not available
<b>Water Solubility</b>	Partially soluble	<b>Partition coefficient: n-octanol/water</b>	Not available

**Other Information**

No additional information available.

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### Section 10 - STABILITY AND REACTIVITY

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#### **Reactivity**

No dangerous reaction known under conditions of normal use. No corrosive effect on metal.

#### **Chemical stability**

Stable under normal conditions of use and recommended storage conditions. See Section 7 for storage recommendations.

#### **Possibility of hazardous reactions**

Exposure to elevated temperatures can cause containers to rupture or explode. Contents are under pressure.

#### **Conditions to avoid**

Temperatures below 70°F (21°C) or temperatures above 90°F (32°C). Avoid heat and flames.

#### **Incompatible materials**

Isocyanates, acids and strong oxidizers.

#### **Hazardous decomposition products**

May include, and are not limited to: oxides of carbon, oxides of nitrogen, hydrogen fluoride and traces of hydrogen cyanide.

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### Section 11 - TOXICOLOGICAL INFORMATION

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#### **Information on toxicological effects**

##### **Acute toxicity**

Assessment of acute toxicity: No known acute effects.

##### **Assessment other acute effects**

Assessment of STOT single: Based on the available information there is no specific target organ toxicity to be expected after a single exposure. Based on expert judgement.

##### **Skin irritation**

Skin contact causes irritation.

##### **Eye irritation**

Causes eye irritation.

##### **Sensitization**

No data available. Chemical structure does not suggest a sensitizing effect.

##### **Genotoxicity**

No data available.

##### **Mutagenicity**

No data available.

##### **Specific organ toxicity- single exposure**

No data available.



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**Specific organ toxicity- repeated exposure**

No data available.

**Aspiration hazard**

No aspiration hazard expected.

**Further information**

Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect.

Assessment of repeated dose toxicity: repeated exposure may affect certain organs. Assessment of

carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. Reproductive

toxicity: The chemical structure does not suggest a specific alert for such an effect.. Assessment of

teratogenicity: The chemical structure does not suggest a specific alert for such an effect. This product has not been tested. These statements are based on the properties of the individual components.

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### Section 12 - ECOLOGICAL INFORMATION

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**Ecotoxicity**

There is a high probability that the product is not acutely harmful to aquatic organisms. The product has not been tested. The statement has been derived from the properties of the individual components.

**Persistence and degradability**

Poorly biodegradable.

**Bioaccumulation potential**

Product is not expected to bioaccumulate.

**Mobility in soil**

Not expected to adsorb to solid soil phase.

**Results of PBT and vPvB assessment**

No data available.

**Other adverse effects**

Additional ecological information: Do not allow material to run into surface waters, wastewater, or soil. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

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### Section 13 - DISPOSAL CONSIDERATIONS

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**Waste Treatment Methods**

Always wear proper protective equipment as you would while spraying the two-component foam in a well-ventilated area.

**Procedure for handling empty or partially used disposable cylinders:**

1. DO NOT INCINERATE CYLINDERS





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2. Dispense the foam into a waste container like a cardboard box or plastic bag. Depressurize the used cylinders using the dispensing unit with a new nozzle attached. Spray the foam until one of the components/cylinders no longer sprays chemical.

3. Remove the nozzle and then continue to depressurize by dispensing the chemicals into a waste container (a box lined with a plastic bag) that has adequate industrial liquid absorbing medium in the bottom. Dispense the residual chemicals until the pressure is down to a minimum or there are just large bubbles in the hose.

4. Close the cylinder valves completely, and then operate the dispensing unit again to empty and depressurize the hoses. Use a 9/16" wrench and remove the hoses from the cylinders. Use caution in case there is some residual chemical and/or pressure in the hoses.

5. Invert the cylinder and point away from face. Slowly open the cylinder over the waste container to catch any residual spray.

6. Return the cylinder to an upright position. Shake the container; there should not be any sloshing of liquid. Make sure to leave valves OPEN-do not close.

7. DISPOSE OF EMPTY CYLINDERS ACCORDING TO APPLICABLE FEDERAL, STATE, AND LOCAL REGULATIONS. CHECK WITH YOUR LOCAL WASTE DISPOSAL SERVICE FOR GUIDANCE.

**NOTE: After dispensing if one cylinder has chemical left in it; treat as hazardous material.**

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### Section 14 - TRANSPORT INFORMATION

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**Note:** Transportation information is for reference only. Customer is urged to consult 49 CFR 100-177 information manual for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

**Land transport US DOT Information:**

UN3500 Chemicals Under Pressure n.o.s. (Fluorinated hydrocarbon, nitrogen) 2.2 (Non-Flammable Gas Label)

**Air transport IATA/CAO Information:**

UN3500 Chemicals Under Pressure n.o.s. (Fluorinated hydrocarbon, nitrogen) 2.2 (Non-flammable Gas Label)

Packing Instruction (Cargo & Passenger) 200

**Sea transport IMDG Information:**

UN3500 Chemicals Under Pressure n.o.s n.o.s. (Fluorinated hydrocarbon, nitrogen) 2.2 (Non-flammable Gas Label)

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### Section 15 - REGULATORY INFORMATION

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**Safety, health, and environmental regulations/legislations specific for the substance or mixture**

**U.S. Federal Regulations:**



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**OSHA Hazard Communication Standard:** This material is classified as hazardous in accordance with OSHA 29 CFR 1910-1200

**TSCA Status:** All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory. This product is not subject to TSCA 12(b) Export Notification.

### **Superfund Amendments and Reauthorization Act (SARA)**

**SARA Section 311/312 Hazard Categories:** Acute Health Hazard, Sudden Release of Pressure Hazard.

**SARA 313 Information:** No components of the product are subject to reporting levels established by Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986.

**SARA 302/304 Extremely Hazardous Substance:** No components of the product exceed the threshold (de minimis) reporting levels established by these sections of the Title III of SARA.

**SARA 302/304 Emergency Planning & Notification:** No components of the product exceed the threshold (de minimis) report levels established by these sections of the Title III of SARA.

**Comprehensive Response Compensation and Liability Act (CERCLA):** None of the substances in this product are contained in levels that exceed the threshold (de minimis) reporting levels established by CERCLA

**Clean Air Act (CAA)** – This product does not have any components listed as a Hazardous Air Pollutant (HAP) designated in CAA Section 112 (b). This product does not contain any Class 1 or Class 2 Ozone depleters.

**Clean Water Act (CWA)** – This products does not have any components listed as a Hazardous Substance under the CWA. None of the chemicals in these products are listed as Priority Pollutants under the CWA. None of the chemicals listed in these products are listed as Toxic Pollutants under the CWA.

### **U.S. State Regulations:**

#### **California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:**

WARNING: This product contains a chemical known to the State of California to cause cancer.

#### **Other U.S. State Inventories:**

1,1,1,2- Tetrafluoroethane (CAS #811-97-2) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: ME, WI

2-dimethylaminoethanol (CAS #108-01-0) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: NJ, PA

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### Section 16 - OTHER INFORMATION

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### HMIS Rating

Health: 2 Fire: 1 Physical Hazard: 1

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe \* = Chronic hazard

### NFPA Ratings

Health: 2 Fire: 1 Reactivity: 1

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

### Summary of Changes

New SDS: August 15, 2017

### 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 this particular use.