



## SAFETY DATA SHEET

### SECTION 1 - IDENTIFICATION

**1.1 Product Identifier:** Versi-Foam Systems 1, 9, 15, 50, and 1.75 pcf Refillable – Standard & Slow Rise – **Component B**

**1.2 Relevant identified uses of the substance or mixture and uses advised against:**

General Use: Component in low pressure polyurethane foam, Component B, for professional use only.  
Uses Advised Against: No further information available.

**1.3 Details of the supplier of the Safety Data Sheet:**

Manufacturer/Supplier: RHH Foam Systems, Inc.  
17100 W Victor Rd  
New Berlin, WI 53151-4139 USA  
1-800-657-0702 / 262-754-8088

**1.4 Emergency telephone numbers:**

Within the USA: CHEMTREC (contract #18811) (24 hours) 1-800-424-9300  
International: CHEMTREC (contract #18811) (24 hours) 001-703-527-3887

### SECTION 2 – HAZARDS IDENTIFICATION

**2.1 Classification of substance or mixture:**

**Product definition:** Mixture  
**OSHA/GHS Classification:** Gases Under Pressure – Compressed Gas  
Skin Irritant Category 2  
Skin Irritant Category 2B  
Specific Target Organ Toxicity – Single Exposure Category 3

**2.2 Label elements:** (Regulation (EC) No 1272/2008)

**Hazard Symbols:**



**Signal Word:** DANGER

**Hazard Statement(s):**

H280: Contains gas under pressure; may explode if heated  
H315: Causes skin irritation.  
H320: Causes eye irritation.  
H335: May cause respiratory irritation.  
H360: May damage fertility of the unborn child if ingested.

**Precautionary Statement(s):**

P102: Keep out of reach of children.  
P201: Obtain special instructions before use.  
P202: Do not handle until all safety precautions have been read and understood.  
P251: Pressurized container: Do not pierce or burn, even after use.  
P261: Avoid breathing vapor, mist, or spray.  
P264: Wash hands thoroughly after handling.  
P271: Use only outdoors or in a well-ventilated area.  
P281: Wear protective gloves/protective clothing/eye protection/ face protection.  
P285: In case of inadequate ventilation: wear respiratory protection.  
P302+P352+P332+P313: IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical attention.  
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P337+P313: If eye irritation persists: Get medical attention.  
P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
P342+P312: If experiencing respiratory symptoms or feel unwell: Call a POISON CENTER or doctor.  
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P362: Take off contaminated clothing and wash it before reuse.  
P403+P233: Store in a well-ventilated place. Keep container tightly closed.  
P405: Store locked up.  
P410: Protect from sunlight.

P411: Store at temperatures not exceeding 120°F (48°C).

P412: Do not expose to temperatures exceeding 250°F (121°C).

P501: Dispose of contents/container in accordance with local, state, national, and international regulations.

**Hazards Not Otherwise Classified:**

Contains substances that can displace oxygen in the air.

### SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components	CAS #	% by Weight
Polyol Blend	Unassigned	40-60%
Pentamethyldiethylenetriamine	3030-47-5	<1%
Organotin Mixture	280-57-9	<1%
	1067-33-0	
	107-21-1	
Flame Retardant Mixture	Unassigned	0-5%
Tetrafluoroethane, 1,1,1,2-	811-97-2	15-20%

### SECTION 4 – FIRST-AID PROCEDURES

**4.1 Description of first aid measures:**

**Eyes:** Flush eyes with large amounts of water for at least 15 minutes. Get medical attention.

**Skin:** Wash skin thoroughly with large amounts of water. Consult a physician if irritation develops or persists. Remove contaminated clothing and wash before re-use.

**Inhalation:** If affected by vapors, remove patient to fresh air and get medical attention. Give oxygen or artificial respiration if necessary. Do not give stimulants. Epinephrine and similar drugs may adversely affect the heart due to a possible risk of eliciting cardiac dysrhythmias.

**Ingestion:** If swallowed, do not induce vomiting. Get medical attention immediately. The hazard of aspirating material into the lungs is greater than the hazard associated with allowing material to progress through the intestinal tract.

### SECTION 5 – FIRE-FIGHTING MEASURES

**5.1 Extinguishing media:**

**Suitable extinguishing media:** Carbon Dioxide, Dry Chemical, or Alcohol Foam are preferred. Water is not recommended but may be applied in large amounts as a fine spray if other extinguishing media are not available.

**Unsuitable extinguishing media:** Do not use direct water stream as it may spread fire.

**5.2 Special hazards arising from the substance or mixture:**

May emit toxic or irritation fumes if burned. Sealed containers may build pressure if exposed to high temperatures as experienced in a fire. If safe to do, spray containers exposed to fire and heat with water to keep cool.

**5.3 Protective equipment / Precautions for fire-fighters:**

Fire-fighters should wear full protective fire-fighting gear including a full face piece, positive-pressure self-contained breathing apparatus (SCBA). Avoid contact with this material during fire-fighting operations. Consider fighting fire from a remote location with unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from area if you hear rising sound from a venting safety device or the container discolors.

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

**6.1 Personal precautions, protective equipment and emergency procedures:**

Always clear area and use protective equipment (as recommended in Section 8) before attempting to stop spill. Wear suitable chemical resistant clothing including foot protection. Always wear eye protection and gloves when handling this product. Avoid any contact. Barricade area. Clear non-emergency personnel from area. Keep upwind of spill. Ventilate area of leak or spill. The area must be evacuated and reentered by persons equipped for decontamination.

**6.2 Environmental precautions:**

Contain liquid to prevent contamination of soil, surface water or ground water. Keep out of ditches, sewers, and water supplies.

**6.3 Methods and materials for containment and cleaning up:**

Contain and absorb spill with inert absorbent material. Shovel material into properly labeled containers for disposal.

### SECTION 7 – HANDLING AND STORAGE

**7.1 Precautions for safe handling:**

Wear proper protective equipment (as recommended in Section 8) and provide proper ventilation during and after application. Avoid contact of this product with water at all times during handling and storage. Do not eat, drink, or smoke where this product is used. Keep equipment clean and use disposable containers and tools whenever possible.

**7.2 Conditions for safe storage, including any incompatibilities:**

Store in a cool, covered, well-ventilated place away from direct sunlight. Keep container tightly closed and store locked up in an upright position. Do not expose to moisture. Do not expose to excessive heat. Do not allow to freeze. Ideal storage temperatures are 65°-90°F (18°-32°C). **Keep out of reach of children.**

**SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION****8.1 Control parameters:**

Ingredient	CAS #	OSHA PEL	ACGIH TLV	WEEL TWA
1,1,1,2 Tetrafluoroethane	811-97-2			4240 mg/m <sup>3</sup> ; 1000 ppm

**8.2 Exposure controls:****Engineering controls:**

Mechanical or local exhaust is required to keep airborne concentrations at safe levels. Exhaust systems should be monitored regularly in case of obstruction.

**Protective equipment:**

**Eye protection:** Wear chemical resistant safety goggles.

**Hand protection:** Wear chemically resistant gloves such as: nitrile/butadiene (NBR), neoprene, butyl rubber or PVC (vinyl). An individual's body reaction to specific glove materials should be considered during the selection process and verified prior to the application. The break through time of the selected glove must be greater than the intended period of use.

**Other protective equipment:** Wear chemical resistant clothing such that no skin is exposed.

**Respiratory protection:** If concentration levels exceed exposure limits, use a NIOSH approved air-purifying respirator equipped with an organic vapor cartridge and particle filter (P100). Employers are required to implement a cartridge change-out schedule for such respirators. If concentration levels are unknown or extremely high use a positive-pressure self-contained breathing apparatus.

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES****9.1 Information on basic physical and chemical properties:**

<b>Appearance:</b>	Clear to Dark Amber liquid.	<b>LFL/UFL:</b>	No Data
<b>Odor:</b>	Faint ethereal odor.	<b>Vapor Pressure:</b>	<25 psia @ 25°C (77°F)
<b>Odor Threshold:</b>	No Data.	<b>Vapor Density:</b>	Heavier than air
<b>pH:</b>	No Data.	<b>Relative Density:</b>	1.16 @ 25°C (77°F)
<b>Melting Point:</b>	No Data.	<b>Solubility:</b>	Negligibly soluble in water (<0.1%)
<b>Freezing Point:</b>	No Data.	<b>Partition Coefficient:</b>	No Data
<b>Boiling Point:</b>	No Data.	<b>Auto-ignition Temp.:</b>	No Data
<b>Flash Point:</b>	>300°F (149°C)	<b>Viscosity:</b>	No Data
<b>Evaporation Rate:</b>	Faster than n-butyl acetate.		

**SECTION 10 – STABILITY AND REACTIVITY****10.1 Reactivity:**

Polyols react with isocyanates generating heat and gases. If product is contaminated pressure may build to hazardous levels in sealed containers.

**10.2 Chemical stability:**

Stable under recommended storage conditions (per section 7).

**10.3 Possibility of hazardous reactions:**

Hazardous polymerization will not occur.

**10.4 Conditions to avoid:**

Open flames, welding arcs, and other high temperature source can induce thermal decomposition.

**10.5 Incompatible materials:**

Avoid long storage in aluminum, other alkali or alkaline earth metals, or their alloys.

**10.6 Hazardous decomposition products:**

Carbon monoxide, carbon dioxide, hydrogen chloride and/or hydrogen fluoride, traces of phosphorous oxides, and traces of carbonyl halides such as phosgene.

**SECTION 11 – TOXICOLOGICAL INFORMATION****11.1 Information on toxicological effects:**

**Likely Routes of Exposure:** Inhalation, ingestion, skin, and eye contact.

**Toxicity Data:**

Oral – LD50 (Estimated) = >2400 mg/kg

Dermal – LD50 (Estimated) = >2300 mg/kg

**Effects and Symptoms:**

**Immediate:** Liquid contact can cause eye damage. Vapors may be irritating to eyes. Skin contact may cause irritation. Excessive inhalation of Tetrafluoroethane vapors can cause respiratory irritation, dizziness, and drowsiness. They may even cause unconsciousness or asphyxiation.

**Delayed:** If not properly cared for areas of skin exposure may develop serious irritation and drying.

**Chronic:** Ingestion may be damaging to fertility and the unborn child. Consult a physician if exposed. . Overexposure to Tetrafluoroethane can cause cardiac sensitization to epinephrine.

**SECTION 12 – ECOLOGICAL INFORMATION****12.1 Ecotoxicity:**

No data available

**12.2 Persistence and degradability:**

No data available

**12.3 Bioaccumulative potential:**

No data available.

**12.4 Mobility in soil:**

No data available

**12.5 Results of PBT and vPvB assessment:**

No data available.

**12.6 Other adverse effects:**

This product contains a substance that may be toxic to fish and aquatic organisms.

**Note:** While there is no data on the ecotoxicity of this product it is always best practice, when handling any chemical, to prevent it from entering drains, sewers, soil, or any bodies of water.

**SECTION 13 – DISPOSAL CONSIDERATIONS****13.1 Waste treatment methods:****Procedure for handling empty or partially used disposable cylinders:**

Versi-Foam® is best disposed of as solid material as opposed to the liquid chemicals. To that end, we recommend the following:

Empty remaining chemicals, if any, into a waste container. Make sure that the waste container contains both "A" and "B" chemicals. They do not have to be on ratio, but they both must be present. Mix the waste chemical blend with a stick so that it becomes a solid substance. This substance can then be disposed of as solid industrial waste.

**VENTING OF THE TANKS:** Turn the tanks upside down. Open tank valves. Leave in this position for 24 hours. Any remaining pressure should be evacuated from the tanks within this period of time.

If only one of the chemicals remains within the container, the chemical must be absorbed and possibly neutralized before disposal.

**For "B" chemical remaining, follow this procedure:**

After venting tanks, empty "B" chemical into waste container. Absorb with dry oil-absorbent material (for example sawdust or vermiculite). Dispose of as ordinary industrial waste.

**Waste, Residue, or Chemical:** DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. The preferred option for disposal is sending waste to a licensed and permitted recycler, reclaimer, incinerator, or other thermal destruction device. All disposal methods must be in compliance with local, state, national, and international regulations. Compliance with these regulations is the sole responsibility of the waste generator. RHH FOAM SYSTEMS, INC. HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION.

**Container:** Containers may contain residue and should be treated with the same considerations as the product itself. Dispose of vented empty tanks as ordinary industrial waste. Check with your City Department of Public Works for more information.

**Procedure for handling empty refillable tanks:**

Refillable tanks, measuring in 9 gallons or larger, should be returned to RHH Foam Systems Inc., where they will be cleaned, refilled and re-distributed.

**SECTION 14 – TRANSPORT INFORMATION**

**Note:** The U.S. Department of Transportation requires that any person preparing a hazardous material for shipping, including packing, marking, labeling and preparation of documents must be trained in accordance with 49 CFR Parts 100 – 185. Contact the U.S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration at <http://phmsa.dot.gov/hazmat> at 1-800-467-4922 or email: [phmsa.hm-training@dot.gov](mailto:phmsa.hm-training@dot.gov) for information on their CD ROM Training Module for Hazardous Materials Transportation.

<p><b>DOT (Over the road transportation):</b></p> <p><b>UN #:</b> UN3500  <b>Shipping Name:</b> Chemical Under Pressure ,N.O.S.(Nitrogen)  <b>Shipping Class:</b> 60  <b>Hazard Class:</b> 2.2  <b>Packing Group:</b> N/A</p>	<p><b>Bulk Transport (&gt;5000 lbs.):</b></p> <p><b>UN #:</b> UN3500  <b>Shipping Name:</b> Chemical Under Pressure, N.O.S. (Nitrogen), RQ (Methylene Diphenyl Diisocyanate)  <b>Hazard Class:</b> 2.2  <b>Packing Group:</b> N/A  <b>Special Precautions:</b> None known</p>
<p><b>IMDG (Ocean transportation):</b></p> <p><b>UN #:</b> UN3500  <b>Shipping Name:</b> Chemical Under Pressure, N.O.S. (Nitrogen)  <b>Shipping Class:</b> 60  <b>Hazard Class:</b> 2.2  <b>Packing Group:</b> N/A  <b>Marine Pollutant:</b> No</p>	<p><b>IATA (Air transportation):</b></p> <p><b>UN #:</b> UN3500  <b>Shipping Name:</b> Chemical Under Pressure, N.O.S. (Nitrogen)  <b>Shipping Class:</b> 60  <b>Hazard Class:</b> 2.2  <b>Packing Group:</b> N/A  <b>Packing Instructions:</b> 218</p>

**Note:** Additional certifications are required to ship hazardous material by ocean (IMDG) and air (IATA).

**SECTION 15 – REGULATORY INFORMATION**

**15.1 Safety, health, and environmental regulations/legislations specific for the substance or mixture:**  
 (Not meant to be all-inclusive – selected regulations represented)

**NOTICE:** The information herein is presented in good faith and believed to be accurate as of the effective date shown below. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another. It is the buyer's responsibility to ensure that its activities comply with federal, state, provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state, provincial, and local laws and regulations.

**U.S. Federal Regulations:**

**SARA Hazard Category:** This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1984 (SARA Title III) and is considered, under applicable definitions, to meet the following categories  
 An immediate health hazard  
 A delayed health hazard

**TSCA (Toxic Substances Control Act):** Regulations 40 CFR 710 – All ingredients are on the TSCA Section 8 (b) Inventory.

**Canadian Regulations:**

The Workplace Hazardous Materials Information System (WHMIS) Classifications for this product are:  
 D1B  
 D2A  
 D2B

**SECTION 16 – OTHER INFORMATION**

**Other Information:**

The reaction of polyols and isocyanates generate heat. Contact of the reaction materials with skin or eyes can cause severe burns and may be difficult to remove from the affected areas. Immediately wash the affected areas with plenty of water and seek medical assistance.

**Date of Preparation/Last Revision:** April 30, 2015

**Prepared by:** RHH Foam Systems Inc.

**WHILE THE INFORMATION AND RECOMMENDATIONS SET FORTH HEREIN ARE BELIEVED TO BE ACCURATE AS OF THE DATE HEREOF, RHH FOAM SYSTEMS INC. MAKES NO WARRANTY WITH RESPECT THERETO AND DISCLAIMS ANY LIABILITY FROM RELIANCE THEREON.**