



# AV-330 SAFEGUARD SAFETY DATA SHEET

Date Issued: 06/01/2015

## Section 1: Identification

**GHS Product Identifier:** AV-330 Safeguard

**Classification:** Hydrophilic Foam

**Product Use:** Industrial Use Only

### Supplier

Avanti International  
1100 Hercules Ave., Suite 320  
Houston, TX 77058  
Phone: 800.877.2570  
Fax: 281.486.7300

### 24 HR. EMERGENCY TELEPHONE NUMBER

Chemtrec: 800.424.9300

## Section 2: Hazards Identification

### GHS Classification

#### Classification

Skin Sens.

Resp. Sens.

#### Category

1

1A

Skin sensitization

Respiratory sensitization

### GHS Label Elements

Hazard pictograms:



<b>Signal Word:</b>	Warning
<b>Hazards Statements:</b>	
H317	May cause an allergic skin reaction.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
<b>Precautionary Statements:</b>	<b>General:</b>
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, open flames, sparks. - No smoking.
P233	Keep container tightly closed.
P260	Do not breathe fume, mist, spray, vapors.
P264	Wash thoroughly after handling.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water.
P304 + P340	IF INHALED: Remove person to fresh air and keep 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.
P314	Get medical advice and attention if you feel unwell.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P342 + P311	If experiencing respiratory symptoms: Call a poison center or doctor.
P361	Remove/Take off immediately all contaminated clothing.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use media for extinction.
P403 + P235	Store in a well-ventilated place. Keep cool.

P405	Store locked up.
P501	Dispose of contents/container according to local, regional, national, and international regulations.

**Other hazards not contributing to the classification:**

Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

**Unknown Acute Toxicity (GHS-US):**

No data available.

### Section 3: Composition/Information on Ingredients

**Hazardous Components**

Weight %	Components	CAS-No./EINCS	Classification
80-85%	Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene]	(CAS #) 59675-67-1	Resp. Sens. 1, H334 Skin Sens. 1, H317
15-20%	Diethylene Glycol Ether Acetate	(CAS #) 112-15-2 (EINCS) 203-940-1	Skin Irrit. 3; H316 Eye Irrit. 2A; H319
>1%	4,4'-Methylenebis(phenyl isocyanate)	(CAS #) 101-68-8 (EINCS) 202-966-0	Acute Tox 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2A; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 STOT RE 2; H373

Full text of H-phrases: See Section 16

### Section 4: First-Aid Measures

**Description of First-Aid Measures**

**First-aid Measures General**

Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

**First-aid Measures After Inhalation**

Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

**First-aid Measures After Skin Contact**

Rinse immediately with plenty of water. Obtain medical attention if irritation develops or persists.

**First-aid Measures After Eye Contact**

Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

**First-aid Measures After Ingestion**

Do NOT induce vomiting. Rinse mouth. Immediately call a Poison Center or doctor/physician.

Most Important Symptoms and Effects, Both Acute and Delayed

Symptoms/Injuries: May cause an allergic skin reaction. Inhalation may cause allergic respiratory reaction with asthma-like symptoms and difficulty breathing.

Symptoms/Injuries After Inhalation: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Symptoms/Injuries After Skin Contact: May cause an allergic skin reaction.

Symptoms/Injuries After Eye Contact: May cause eye irritation.

Symptoms/Injuries After ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Exposure may produce an allergic reaction.

**Chronic Symptoms:**

Exposure may produce an allergic reaction.

Indication of Any Immediate Medical Attention and Special Treatment Needed. If exposed or concerned, get medical advice and attention.

## Section 5: Fire-Fighting Measures

<b>Suitable Extinguishing Media:</b>	Use dry chemical, water spray or other extinguishing media appropriate for surrounding fire.
<b>Unsuitable Extinguishing Media:</b>	Do not use heavy water stream. Use of heavy stream of water may spread fire.
<b>Special Hazards Arising from Substance or Mixture</b>	<b>Fire Hazard:</b> Not considered flammable but may burn at high temperatures. <b>Reactivity:</b> Hazardous reactions will not occur under normal conditions. <b>Explosion Hazard:</b> Product is not explosive. DO NOT weld, burn or cut empty containers.
<b>Fire-fighting Procedure</b>	Exercise caution when fighting any chemical fire. Fire fighters should wear self-contained breathing apparatus to protect against inhalation of cyanates vapors and other decomposition/combustion products. Do not release runoff from fire control methods to sewers or waterways. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face piece operated in pressure-demand or positive-pressure mode.
<b>Other information</b>	Refer to Section 9 for flammability properties.

## Section 6: Accidental Release Measures

### Personal Precautions, Protective Equipment and Emergency Procedures

#### General Measures

Do not get in eyes, on skin, or on clothing. Do not breathe vapor or mist.

#### For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

#### For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

#### Environmental Precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

#### Methods and Material for Containment and Cleaning-Up

For Containment: Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.

For Cleaning Up: Clear up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

#### Reference to Other Sections

See Heading 8. Exposure controls and personal protection

## Section 7: Handling and Storage

### Precautions for Safe Handling

Keep away from sources of ignition - No smoking. Keep away from heat & open flame. Avoid all eye & skin contact & do not breathe vapor or mist. Always wash hands after handling. Do not eat, drink or smoke when using this product. Ensure there is adequate ventilation. Wear recommended personal protective equipment. Take precautionary measures against static discharge. Use grounded electrical/mechanical equipment.

### Hygiene Measures

Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

**Conditions for Safe Storage (Including Any Incompatibilities)**

Technical Measures: Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use.

Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials. Shelf life is 6 months in unopened containers.

Incompatible Products: Isocyanates react slowly with water, alcohols, amines, acids and bases.

## Section 8: Exposure Controls/Personal Protection

### Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

#### 4,4'-methylenediphenyl diisocyanate (4,4' MDI) (101-68-8)

ACGIH	TLV (ppm)	0.0050 ppm
OSHA	PEL (ppm)	0.02 ppm
NIOSH	TWA (ppm)	0.0050 ppm

### Exposure Controls

Appropriate Engineering Controls: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal Protective Equipment: Protective goggles, gloves, protective clothing. If insufficient ventilation: wear respiratory protection



### Personal Protective Equipment

#### Respiratory Protection:

Follow OSHA respirator regulation 29 CFR 1910.134 and European Standards EN 141, 143 and 371; wear a MSHA/NIOSH or European Standards EN 141, 143 and 371 approved respirators when needed.

#### Skin and Body Protection:

Wear suitable protective clothing. Wear chemically resistant protective gloves.

#### Eye Protection:

Chemical goggles or safety glasses.

#### Environmental Exposure Controls:

Do not allow the product to be released into the environment.

#### Consumer Exposure Controls:

Do not eat, drink or smoke during use.

## Section 9: Physical and Chemical Properties

**Appearance:** Transparent yellow liquid

**Odor:** Slightly musty odor

**Odor Threshold:** 0.39 ppm (MDI)

**pH:** No data available

**Freezing Point:** No data available

**Boiling Point:** 245°C (450°F) @ 750 mm Hg for MDI

**Flashpoint:** 116.67°C (242°F) CC

**Evaporation Rate:** No data available (butylacetate=1)

**Flammability:** No data available

**Lower Explosion Limits:** Not determined

**Upper explosion limits:** Not determined

**Vapor Pressure:** Less than .010 mm Hg @ 68°F

**Relative Vapor Density at 20°C:** 3.66 (air=1)

**Relative Density:** No data available.

**Solubility in Water:** Completely soluble

**Partition Coefficient n-octanol/water:** No data available

**Auto-ignition Temperature:** No data available

**Decomposition Temperature:** No data available

**Viscosity:** 850 CPS @ 77°F (25°C)

**Oxidizing Properties:** No data available

**Specific Gravity:** 1.09 (water = 1)

**Explosive Properties:** Product is not explosive; however, formation of explosive air vapor mixture is possible.

## Section 10: Stability and Reactivity

### Reactivity

Hazardous reactions will not occur under normal conditions.

### Chemical stability

Stable under recommended handling and storage conditions (see Section 7).

### Possibility of hazardous reactions

May occur, contact with moisture and other materials, which react with isocyanates, or temperatures about 400° F (204° C), may cause some polymerization.

### Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.

### Incompatible materials

Water, amines, strong bases, and alcohols will cause some corrosion to copper alloys and aluminum.

### Hazardous decomposition products

Can produce carbon dioxide, carbon monoxide.

## Section 11: Toxicological Information

### Acute Toxicity/Effects

Not Classified

Diethylene Glycol Ether Acetate (112-15-2)	
LD50 Oral Rat (mg/kg)	11,200 mg/kg
LD50 Dermal Rabbit	15,281 mg/kg
4,4'-Methylenebis(phenyl isocyanate) (101-68-8)	
LD50 Oral Rat	9,200 mg/kg
LD50 Inhalation Rat	2.24 mg/l (1 hr)
Skin Corrosion/Irritation	May cause minor skin irritation
Serious Eye Damage/Irritation	May cause mild eye irritation
Respiratory or Skin Sensitization	May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause an allergic skin reaction.
Germ Cell Mutagenicity	Not classified

Carcinogenicity	Not classified
Reproductive Toxicity	Not classified
STOT (Single Exposure)	Not classified
STOT (Repeated Exposure)	Not classified
Aspiration Hazard	Not classified

## Section 12: Ecological Information

### Toxicity

#### 4,4'-Methylenebis(phenyl isocyanate) (101-68-8)

EC50 Daphnia 1	0.35 mg/l (Exposure time: 24 h - Species: Daphnia magna [Static])
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#### Persistence and Degradability:

No additional information available.

#### Bioaccumulative Potential:

No additional information available.

#### Mobility in Soil:

No additional information available.

#### Other Adverse Effects:

Avoid release to the environment.

## Section 13: Disposal Considerations

### Waste Disposal Recommendations:

Dispose of waste material in accordance with all local, regional, national, & international regulations.

### Sewage Waste Recommendations:

Do not dispose of waste into sewer.

## Section 14: Transport Information

### DOT (Department of Transportation)

**Proper Shipping Name:** Liquid Resin (Non-Regulated)

**Hazard Class:** Non-regulated

**UN Number:** Not applicable

**Packing Group:** None

**Label:** Not applicable

**Placard:** Not applicable

### NMFC (National Motor Freight Carriers)

**Freight Class:** 55

**IMO / IMDG CODE (OCEAN) HAZARD CLASS DIVISION NUMBER:** Non-regulated/Not dangerous goods

**ICAO / IATA (AIR) HAZARD CLASS DIVISION NUMBER:** Non-regulated/Not dangerous goods

## Section 15: Regulatory Information

### US Federal Regulations

**SARA Section 311/312 Hazard Classes:** Acute Health Hazard

### SARA Section 313 Components

Diethylene Glycol Ether Acetate (112-15-2)

4,4'-Methylenebis(phenyl isocyanate) (101-68-8)

Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 1,1'-methylenebis[4-isocyanatobenzene] (59675-67-1)- Listed on the United States TSCA (Toxic Substances Control Act) inventory

**US State Regulations**

Diethylene Glycol Ether Acetate (112-15-2)

U.S. - Pennsylvania - RTK (Right to Know) List

U.S. – New Jersey - RTK (Right to Know) List

4,4'-Methylenebis(phenyl isocyanate) (101-68-8)

U.S. - Pennsylvania - RTK (Right to Know) List

U.S. – New Jersey - RTK (Right to Know) List

U.S. – Massachusetts – RTK (Right to Know) List

**Section 16: Other Information**

Skin Sens. A  
Resp. Sens. 1

H317  
H334

Skin sensitization Category 1  
May cause allergy or asthma symptoms or breathing difficulties if inhaled.

<b>NFPA 704M ratings:</b>	<b>Health 2</b>	<b>Flammability 1</b>	<b>Reactivity 1</b>	<b>Other</b>
<b>HMIS ratings: 0-Insignificant 1-Slight 2-Moderate 3-High 4-Extreme</b>	<b>Health 2</b>	<b>Flammability 1</b>	<b>Physical Hazard 1</b>	<b>Personal Protection G</b>

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