

# Safety Data Sheet

FORBO ARMORFIX  
Revision Number 1

Revision Date 22-May-2019  
Supersedes Date: 22-May-2019

## 1. Identification

### 1.1. Product Identifier

Product Name FORBO ARMORFIX

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended use Adhesives.  
Uses advised against No information available

### 1.3. Details of the supplier of the safety data sheet

**Responsible Party**  
Forbo Flooring NA  
Humbolt Industrial Park  
8 Maplewood Drive  
Hazelton, PA 18202  
Telephone: 800-842-7839  
www.forboflooringna.com

### 1.4. Emergency telephone number

Telephone: Chemtrec: 800-424-9300

## Section 2: HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

Not a dangerous substance or mixture according to OSHA 29 CFR 1910.1200

### 2.2. Label Elements

#### EMERGENCY OVERVIEW

Not a dangerous substance or mixture according to OSHA 29 CFR 1910.1200.

**Appearance** No information available      **Physical State** Liquid      **Odor** No information available

**Precautionary Statements - Prevention**  
Not applicable

**Precautionary Statements - Response**  
Not applicable

**Precautionary Statements - Storage**  
Not applicable

**Precautionary Statements - Disposal**  
Not applicable

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## Hazards not otherwise classified (HNOC)

Not applicable

## 2.3. Other Information

No information available.

## Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

Not applicable

### 3.2 Mixtures

Chemical name	CAS No.	Weight-%
Glass, oxide, chemicals	65997-17-3	10 - 30

*\*The exact percentage (concentration) of composition has been withheld as a trade secret.*

## Section 4: FIRST AID MEASURES

### 4.1. Description of first aid measures

<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area. If eye irritation persists: Get medical advice/attention.
<b>Skin contact</b>	Wash off immediately with plenty of water for at least 15 minutes. In the case of skin irritation or allergic reactions see a physician.
<b>Inhalation</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
<b>Ingestion</b>	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

### 4.2. Most important symptoms and effects, both acute and delayed

**Symptoms** No information available.

### 4.3. Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

### 4.4. Reference to Other Sections

**Reference to other sections** Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION  
Section 11: TOXICOLOGY INFORMATION

## Section 5: FIRE-FIGHTING MEASURES

### 5.1. Extinguishing media

#### Suitable extinguishing media

Water spray (fog). Carbon dioxide (CO<sub>2</sub>). Foam. Dry chemical. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### Unsuitable extinguishing media

None known.

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## 5.2. Special hazards arising from the substance or mixture

### Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Hazardous Combustion Products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Hydrocarbons.

### Explosion Data

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

## 5.3. Advice for firefighters

### Special protective actions for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## **Section 6: ACCIDENTAL RELEASE MEASURES**

### 6.1. Personal precautions, protective equipment and emergency procedures

**Personal precautions** Evacuate personnel to safe areas. Use personal protection recommended in Section 8.

### 6.2. Environmental precautions

**Environmental precautions** Keep people away from and upwind of spill/leak. See Section 12 for additional Ecological Information.

### 6.3. Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk.

**Methods for cleaning up** Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other non-combustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

### 6.4. Reference to other sections

**Reference to other sections** Section 7: HANDLING AND STORAGE  
Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION  
Section 13: DISPOSAL CONSIDERATIONS

## **Section 7: HANDLING AND STORAGE**

### 7.1. Precautions for safe handling

**Advice on safe handling** Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Do not reuse container.

### 7.2. Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep from freezing. Keep containers tightly closed in a cool, well-ventilated place.

**Incompatible materials** No information available.

### 7.3. Specific end use(s)

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**Specific Use(s)**  
Adhesives.

**Other information** No information available.

## 7.4. References to Other Sections

**Reference to other sections** Section 13: DISPOSAL CONSIDERATIONS  
Section 10: STABILITY AND REACTIVITY

## Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

#### Exposure Guidelines

Chemical name	ACGIH TLV	NIOSH IDLH	OSHA PEL	Mexico
Glass, oxide, chemicals 65997-17-3	TWA: 1 fiber/cm <sup>3</sup> respirable fibers: length >5 µm, aspect ratio >=3:1, as determined by the membrane filter method at 400-450X magnification [4-mm objective], using phase-contrast illumination TWA: 5 mg/m <sup>3</sup> inhalable particulate matter	-	-	-
Chemical name	Argentina	Brazil	Chile	Venezuela
Glass, oxide, chemicals 65997-17-3	TWA: 1 fiber/cm <sup>3</sup> TWA: 5 mg/m <sup>3</sup>	-	-	-

### 8.2. Exposure controls

**Engineering controls** Use with local exhaust ventilation. Ensure adequate ventilation, especially in confined areas. Use explosion-proof ventilating equipment.

#### Personal protective equipment [PPE]

**Eye/face protection** Wear safety glasses with side shields (or goggles). Avoid contact with eyes.

**Skin and body protection** Wear suitable chemical resistant gloves. The selection of suitable gloves does not only depend on the material, but also on further marks of quality and various manufacturers.

**Respiratory protection** If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General hygiene considerations** Use personal protective equipment as required. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

## Section 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

**Physical State** Liquid  
**Color** No information available  
**Odor** No information available  
**Odor Threshold** No information available

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<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	8.0 - 9.0	
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash Point	> 100 °C / 212 °F	
Evaporation Rate	No information available	
Flammability (solid, gas)	Not applicable for liquids	
Flammability Limit in Air		
Upper flammability or explosive limits	No information available	
Lower flammability or explosive limits	No information available	
Vapor Pressure	No information available	
Vapor Density	No information available	
Relative Density	No information available	
Water Solubility	No information available	
Solubility in Other Solvents		
Partition coefficient	No information available	
Autoignition Temperature	No information available	
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	No information available	
Explosive properties	No information available	
Oxidizing properties	No information available	
<b>9.2. Other information</b>		
Softening Point	No information available	
Molecular Weight	No information available	
Solvent content (%)	No information available	
Solid content (%)	70-75	
Density	9.20 - 9.60 LB/GAL	
VOC (volatile organic compound)		0 g/L

## Section 10: STABILITY AND REACTIVITY

### 10.1. Reactivity

None under normal use conditions.

### 10.2. Chemical stability

Stable under normal conditions.

### 10.3. Possibility of hazardous reactions

None under normal processing.

### 10.4. Conditions to avoid

Extremes of temperature and direct sunlight. Keep from freezing.

### 10.5. Incompatible materials

No information available.

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## 10.6. Hazardous decomposition products

Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Hydrocarbons.

## Section 11: TOXICOLOGY INFORMATION

### 11.1. Information on toxicological effects

<b>Product Information</b>	No data available
<b>Inhalation</b>	Based on available data, the classification criteria are not met.
<b>Eye contact</b>	Based on available data, the classification criteria are not met.
<b>Skin contact</b>	Based on available data, the classification criteria are not met.
<b>Ingestion</b>	Based on available data, the classification criteria are not met.

### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Glass, oxide, chemicals 65997-17-3	>2000 mg/Kg Rat	-	LC50 > 0.691 mg/l (Rat) 4-Hr

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Symptoms</b>	No information available.
<b>Skin corrosion/irritation</b>	No information available.
<b>Serious eye damage/eye irritation</b>	No information available.
<b>Irritation</b>	No information available.
<b>Corrosivity</b>	No information available.
<b>Sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>Developmental Toxicity</b>	No information available.
<b>Teratogenicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Chronic Toxicity</b>	No information available.
<b>Target Organ Effects</b>	No information available.
<b>Aspiration hazard</b>	No information available.
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical name	ACGIH	IARC	NTP	OSHA
Glass, oxide, chemicals 65997-17-3	-	Group 3	-	-

IARC (International Agency for Research on Cancer)  
*Group 3 - Not Classifiable as to Carcinogenicity in Humans*

## Section 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

No information available

### 12.2. Persistence and degradability

No information available.

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## 12.3. Bioaccumulative potential

No information available.

## 12.4. Mobility in soil

No information available.

## Other adverse effects

No information available

## **Section 13: DISPOSAL CONSIDERATIONS**

### 13.1. Waste treatment methods

#### **Disposal of Wastes**

It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations

#### **Contaminated packaging**

Dispose of in accordance with federal, state and local regulations

## **Section 14: TRANSPORT INFORMATION**

**Note:** Keep from freezing

**DOT** Not regulated

**IATA** Not regulated

**IMDG** Not regulated

## **Section 15: REGULATORY INFORMATION**

### Global Inventories

<b>TSCA</b>	Listed
<b>DSL</b>	Not Listed

#### **Legend:**

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL** - Canadian Domestic Substances List

**Listed** - The components of this product are either listed or exempt from listing on inventory.

**Not Listed** - One or more components of this product are not listed on inventory.

### United States of America

#### **SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

#### **SARA 311/312 Hazard Categories**

Acute Health Hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

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## Europe

### **Restrictions of Use of Hazardous Substances (RoHS) Directive 2011/65/EU**

This product does not contain Lead (7439-92-1), Cadmium (7440-43-9), Mercury (7439-97-6), Hexavalent chromium (7440-47-3), Polybrominated biphenyls (PBB), and Polybrominated diphenyl ethers (PBDE) above the regulated limit mentioned in this regulation

### **SVHC: Substances of Very High Concern for Authorization:**

This product does not contain candidate substances of very high concern at a concentration  $\geq 0.1\%$  (Regulation (EC) No. 1907/2006 (REACH), Article 59)

## **Section 16: OTHER INFORMATION**

### **Key or legend to abbreviations and acronyms used in the safety data sheet**

No information available

### **Key Literature References and Sources for Data**

No information available

<b>Revision Date</b>	22-May-2019
<b>Revision note</b>	Not applicable.
<b>Training Advice</b>	No information available
<b>Further information</b>	No information available

### **Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**