

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

Eye contact	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.
Skin contact	Wash off immediately with plenty of water for at least 15 minutes. In the case of skin irritation or allergic reactions see a physician.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Ingestion	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 (CO₂). 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 (CO₂). 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 ³ 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 ³ inhalable particulate matter	-	-	-

Chemical name	Argentina	Brazil	Chile	Venezuela
Glass, oxide, chemicals 65997-17-3	TWA: 1 fiber/cm ³ TWA: 5 mg/m ³	-	-	-

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	
9.2. Other information		
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 (CO₂). Hydrocarbons.

Section 11: TOXICOLOGY INFORMATION

11.1. Information on toxicological effects

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

Symptoms	No information available.
Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Irritation	No information available.
Corrosivity	No information available.
Sensitization	No information available.
Germ cell mutagenicity	No information available.
Reproductive toxicity	No information available.
Developmental Toxicity	No information available.
Teratogenicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Chronic Toxicity	No information available.
Target Organ Effects	No information available.
Aspiration hazard	No information available.
Carcinogenicity	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

TSCA	Listed
DSL	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

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

Disclaimer

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End of Safety Data Sheet