

Safety Data Sheet

In accordance with Hazardous Products Regulations (HPR) (SOR/2015-17)

FORBO EZ-ON 100
Revision Number 1

Revision Date 23-May-2019
Supersedes Date: 23-May-2019

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product identifier

Product Name FORBO EZ-ON 100

Other means of identification

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use Adhesives

Uses advised against No information available

Details of the supplier of the safety data sheet

Responsible Party

Forbo Flooring Systems
3983 Nashua Dr., Unit 1
Mississauga, ON L4V 1P3 Canada
Telephone: 800-268-8108

Emergency telephone number

Chemtrec: 1-800-424-9300

2. Hazards Identification

Classification

Serious eye damage/eye irritation	Category 1
Skin sensitization	Category 1

Label elements

Danger

Hazard statements

Causes serious eye damage
May cause an allergic skin reaction



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Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor

Skin

IF ON SKIN: Wash with plenty of water and soap
If skin irritation or rash occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse

Precautionary Statements - Storage

Not applicable

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.

Unknown acute toxicity 76 % of the mixture consists of ingredient(s) of unknown toxicity

3. Composition/information on Ingredients

Substance

Not applicable.

Mixture

Chemical name	CAS No.	Weight-%	Hazardous Material Information Review Act registry number (HMIRA registry #)	Date HMIRA filed and date exemption granted (if applicable)
N-[3-(trimethoxysilyl)propyl]ethane-1,2-diamine	1760-24-3	1 - 5	-	-
Silane, ethenyltrimethoxy-	2768-02-7	1 - 5	-	-
Titanium dioxide	13463-67-7	0.1 - 1	-	-

4. First Aid Measures

FIRST AID

General advice Show this safety data sheet to the doctor in attendance.

Inhalation IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

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Get medical attention immediately if symptoms occur.

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Keep eye wide open while rinsing. Remove contact lenses, if present and easy to do. Continue rinsing. Do not rub affected area. Call a physician.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Wash contaminated clothing before reuse. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician.
Ingestion	Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person. If swallowed, call a poison control center or physician immediately.
Self-protection of the first aider	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

Most important symptoms and effects, both acute and delayed

Symptoms Burning sensation. Itching. Rashes. Hives. May cause redness and tearing of the eyes.

Indication of any immediate medical attention and special treatment needed

Note to physicians Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing. May cause sensitization by skin contact. Treat symptomatically.

5. Fire-Fighting Measures

Suitable extinguishing media	Water spray, carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam.
Unsuitable extinguishing media	Full water jet.
Specific hazards arising from the chemical	Product is or contains a sensitizer. May cause sensitization by skin contact.
Hazardous Combustion Products	Carbon monoxide. Carbon dioxide (CO ₂).
Explosion Data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Special protective equipment for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Use personal protective equipment as required. Do not get in eyes, on skin, or on clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Do not touch damaged packages or spilled material.
Other information	Refer to protective measures listed in Sections 7 and 8.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas. See Section 12 for additional Ecological Information.

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Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).
Methods for cleaning up	Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other noncombustible absorbent material. Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling	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. Ensure adequate ventilation. In case of insufficient ventilation, wear suitable respiratory equipment. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Take off contaminated clothing and wash before reuse.
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Conditions for safe storage, including any incompatibilities

Storage Conditions	Protect from moisture. Keep/store only in original container. Protect from sunlight. Store in a well-ventilated place. Keep at temperatures between 41 and 95 °F. Keep away from food, drink and animal feeding stuffs.
Reference to other sections	Section 10: STABILITY AND REACTIVITY

8. Exposure Controls/Personal Protection

Control parameters

Exposure Limits	. This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.
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Chemical name	Alberta	British Columbia	Ontario TWA	Quebec
Silane, ethenyltrimethoxy- 2768-02-7			STEL: 10 ppm STEL: 60 mg/m ³	
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 10 mg/m ³ TWA: 3 mg/m ³	TWA: 10 mg/m ³	TWA: 10 mg/m ³

OTHER INFORMATION	Small amounts of methanol (CAS 67-56-1) are formed by hydrolysis and released upon curing.
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Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
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Individual protection measures, such as personal protective equipment

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Eye/face protection	Tight sealing safety goggles.
Hand protection	Wear suitable gloves.
Skin and body protection	Wear suitable protective clothing.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
General hygiene considerations	Wear suitable gloves and eye/face protection. Handle in accordance with good industrial hygiene and safety practice. Do not eat, drink or smoke when using this product. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Take off contaminated clothing and wash it before reuse. Regular cleaning of equipment, work area and clothing is recommended.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State	Liquid
Appearance	viscous
Color	light brown
Odor	Characteristic
Odor Threshold	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No data available	
Melting point / freezing point	No data available	
Boiling point / boiling range	No data available	
Flash Point	156 °C / 313 °F	
Evaporation Rate	No data available	
Flammability (solid, gas)	Not applicable for liquids .	
Flammability Limit in Air		
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Vapor Pressure	No data available	
Vapor Density	No data available	
Relative Density	No data available	
Water Solubility	No data available	
Solubility in Other Solvents	No data available	
Partition coefficient	No data available	
Autoignition Temperature	No data available	
Decomposition Temperature	No data available	
Kinematic Viscosity	No data available	
Dynamic Viscosity	No data available	
Explosive properties	No information available.	
Oxidizing properties	No information available.	
Other information		
Softening Point	No information available	
Molecular Weight	No information available	
Density		1.02 g/cm ³
Bulk Density	No information available	
Solid content (%)	No information available	
VOC (volatile organic compound)	No information available	

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10. Stability and Reactivity

Reactivity	Product cures with moisture.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	None known based on information supplied.
Incompatible materials	Strong acids. Strong bases. Strong oxidizing agents. Water.
Hazardous decomposition products	None known based on information supplied.

11. Toxicological Information

Information on likely routes of exposure

Product Information

Inhalation	Based on available data, the classification criteria are not met.
Eye contact	Causes serious eye damage.
Skin contact	Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. May cause sensitization by skin contact.
Ingestion	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Redness. Burning. Itching. Rashes. Hives. May cause redness and tearing of the eyes.
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Numerical measures of toxicity

Acute Toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral)	13,655.90 mg/kg
ATEmix (dermal)	61,921.50 mg/kg mg/l
ATEmix (inhalation-vapor)	169.20 mg/l

Unknown acute toxicity

76 % of the mixture consists of ingredient(s) of unknown toxicity
71 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
71 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
76 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
76 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
76 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
N-[3-(trimethoxysilyl)propyl]ethane-1,2-diamine 1760-24-3	= 2295 mg/kg (Rat)	>2000 mg/Kg (Rat)	LC50 4H (Aerosol)1.5 - 2.44 mg/L air
Silane, ethenyltrimethoxy- 2768-02-7	LD 50 = 7120 -7236 mg/kg (Rat) OECD 401	= 3360 µL/kg (Rabbit)	LC50 (4hr) 16.8 mg/l (rat) OECD TG 403

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Titanium dioxide 13463-67-7	> 10000 mg/kg (Rat)	-	-
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Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation May cause skin irritation.

Component Information					
Silane, ethenyltrimethoxy- (2768-02-7)					
Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	Dermal	0.5 mL	24 hours	Non-irritant

Serious eye damage/eye irritation Causes burns. Causes serious eye damage.

Respiratory or skin sensitization May cause sensitization by skin contact.

Germ cell mutagenicity No information available.

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. As Titanium dioxide (13463-67-7) is inextricably bound in the polymer matrix, it is not expected to be available as an airborne hazard (dust, mist, or spray) under normal condition of uses.

Chemical name	ACGIH	IARC	NTP	OSHA
Titanium dioxide 13463-67-7	-	Group 2B	-	X

IARC (International Agency for Research on Cancer)

Group 2B - Possibly Carcinogenic to Humans

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

X - Present

Reproductive toxicity No information available.

STOT - single exposure No information available.

STOT - repeated exposure No information available.

Target Organ Effects Eyes, Skin.

Subchronic Toxicity No information available.

Neurological Effects No information available.

Other Adverse Effects No information available.

Aspiration hazard No information available.

12. Ecological Information

Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Silane, ethenyltrimethoxy- 2768-02-7	EC 50 (72h) > 957 mg/l (Desmodesmus subspicatus) EU Method C.3	LC50 (96h) = 191 mg/l (Oncorhynchus mykiss)	-	EC50(48hr) 168.7mg/l (Daphnia magna)

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Persistence and degradability No information available.

Component Information			
Silane, ethenyltrimethoxy- (2768-02-7)			
Method	Exposure time	Value	Results
OECD Test No. 301F: Ready Biodegradability: Manometric Respirometry Test (TG 301 F)	28 days	BOD	51 % Not readily biodegradable

Bioaccumulative potential No information available.

Chemical name	Partition coefficient
Silane, ethenyltrimethoxy- 2768-02-7	1.1

Mobility in soil No information available

Other Adverse Effects No information available.

13. Disposal Considerations

Waste treatment methods

Waste from residues/unused products Uncured product should be disposed of as hazardous waste. Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

Contaminated packaging Do not reuse empty containers.

14. Transport Information

TDG Not regulated

IATA Not regulated

IMDG Not regulated

15. Regulatory Information

NPRI - National Pollutant Release Inventory
No component is listed on the NPRI above the threshold

European Union

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)

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International Inventories

TSCA	Listed
DSL	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.

16. Other information, including date of preparation of the last revision

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

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA TWA (time-weighted average)
Ceiling Maximum limit value

STEL
*

STEL (Short Term Exposure Limit)
Skin designation

Revision Date 23-May-2019

Revision note 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