

# Safety Data Sheet

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

FORBO NR99 STEP 2  
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 NR99 STEP 2

### 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

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A

### Label elements

#### Warning

#### Hazard statements

Causes skin irritation  
Causes serious eye irritation



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## Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling  
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  
If eye irritation persists: Get medical advice/attention

### Skin

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

## Precautionary Statements - Storage

Not applicable

## Precautionary Statements - Disposal

Not applicable

## Other information

**Unknown acute toxicity** 1 % 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)
Limestone	1317-65-3	10 - 30	-	-
Carbonic acid, magnesium salt (1:1)	546-93-0	0.5 - 1.5	-	-
1,2-Propylene glycol	57-55-6	0.5 - 1.5	-	-
2-(Dimethylamino)ethanol	108-01-0	0.5 - 1.5	-	-
Quartz	14808-60-7	0.1 - 1	-	-

## 4. First Aid Measures

### FIRST AID

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

**Inhalation** Remove to fresh air. Get medical attention immediately if symptoms occur.

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<b>Eye contact</b>	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. Get medical attention if irritation develops and persists.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water for at least 15 minutes. Get medical attention if irritation develops and persists.
<b>Ingestion</b>	Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. If symptoms persist, call a physician.
<b>Self-protection of the first aider</b>	Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

**Symptoms** Irritating to skin. May cause redness and tearing of the eyes.

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

**Note to physicians** Treat symptomatically.

## **5. Fire-Fighting Measures**

<b>Suitable extinguishing media</b>	Dry chemical, CO2 or water spray. Foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Unsuitable extinguishing media</b>	Full water jet.
<b>Specific hazards arising from the chemical</b>	No information available.
<b>Hazardous Combustion Products</b>	Carbon monoxide. Carbon dioxide (CO2). Hydrocarbons.
<b>Explosion Data</b>	
<b>Sensitivity to mechanical impact</b>	None.
<b>Sensitivity to static discharge</b>	None.
<b>Special protective equipment for fire-fighters</b>	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

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

### Environmental precautions

**Environmental precautions** Prevent further leakage or spillage if safe to do so. See Section 12 for additional Ecological Information.

### Methods and material for containment and cleaning up

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<b>Methods for containment</b>	Prevent further leakage or spillage if safe to do so.
<b>Methods for cleaning up</b>	Use personal protective equipment as required. Dam up. Cover liquid spill with sand, earth or other noncombustible absorbent material. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.
<b>Prevention of secondary hazards</b>	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. Avoid contact with skin, eyes or clothing. Wash thoroughly after handling. Take off contaminated clothing and wash before reuse.

### Conditions for safe storage, including any incompatibilities

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

**Reference to other sections** Section 10: STABILITY AND REACTIVITY

## 8. Exposure Controls/Personal Protection

### Control parameters

**Exposure Limits** . This product contains substances which in their raw state are powder form, however in this product they are in a non-respirable form. Inhalation of powder/dust particles is unlikely to occur from exposure to this product.

Chemical name	Alberta	British Columbia	Ontario TWA	Quebec
Limestone 1317-65-3	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup> STEL: 20 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup>
Carbonic acid, magnesium salt (1:1) 546-93-0		TWA: 10 mg/m <sup>3</sup> TWA: 3 mg/m <sup>3</sup>		TWA: 10 mg/m <sup>3</sup>
1,2-Propylene glycol 57-55-6			TWA: 10 mg/m <sup>3</sup> TWA: 50 ppm TWA: 155 mg/m <sup>3</sup>	
2-(Dimethylamino)ethano l 108-01-0			TWA: 3 ppm TWA: 11 mg/m <sup>3</sup> STEL: 6 ppm STEL: 22 mg/m <sup>3</sup>	
Quartz 14808-60-7	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.025 mg/m <sup>3</sup>	TWA: 0.10 mg/m <sup>3</sup>	TWA: 0.1 mg/m <sup>3</sup>

### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

### Individual protection measures, such as personal protective equipment

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<b>Eye/face protection</b>	If splashes are likely to occur, wear safety glasses with side-shields.
<b>Hand protection</b>	Wear suitable gloves. Impervious gloves.
<b>Skin and body protection</b>	Wear suitable protective clothing. Long sleeved clothing.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
<b>General hygiene considerations</b>	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

<b>Physical State</b>	Liquid
<b>Appearance</b>	Liquid
<b>Color</b>	Blue
<b>Odor</b>	No information available
<b>Odor Threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	8.0 - 9.0	
<b>Melting point / freezing point</b>	No data available	
<b>Boiling point / boiling range</b>	No data available	
<b>Flash Point</b>	> 100 °C / 212 °F	
<b>Evaporation Rate</b>	No data available	
<b>Flammability (solid, gas)</b>	Not applicable for liquids .	
<b>Flammability Limit in Air</b>		
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	
<b>Vapor Pressure</b>	No data available	
<b>Vapor Density</b>	No data available	
<b>Relative Density</b>	No data available	
<b>Water Solubility</b>	No data available	
<b>Solubility in Other Solvents</b>	No data available	
<b>Partition coefficient</b>	No data available	
<b>Autoignition Temperature</b>	No data available	
<b>Decomposition Temperature</b>	No data available	
<b>Kinematic Viscosity</b>	No data available	
<b>Dynamic Viscosity</b>	No data available	
<b>Explosive properties</b>	No information available.	
<b>Oxidizing properties</b>	No information available.	
<b>Other information</b>		
<b>Softening Point</b>	No information available	
<b>Molecular Weight</b>	No information available	
<b>Density</b>		1.22 g/cm <sup>3</sup>
<b>Bulk Density</b>	No information available	
<b>Solid content (%)</b>	No information available	

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VOC (volatile organic compound) 0 g/L / 0 %

## 10. Stability and Reactivity

**Reactivity** No information available.

**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.

**Hazardous decomposition products** Carbon monoxide. Carbon dioxide (CO<sub>2</sub>). Hydrocarbons.

## 11. Toxicological Information

### Information on likely routes of exposure

#### Product Information

**Inhalation** Based on available data, the classification criteria are not met.

**Eye contact** Irritating to eyes. Causes serious eye irritation.

**Skin contact** Causes skin irritation.

**Ingestion** Based on available data, the classification criteria are not met.

### Symptoms related to the physical, chemical and toxicological characteristics

**Symptoms** Redness. May cause redness and tearing of the eyes.

### Numerical measures of toxicity

#### Acute Toxicity

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

**ATEmix (inhalation-dust/mist)** 49.10 mg/l  
**ATEmix (inhalation-vapor)** 294.10 mg/l

#### Unknown acute toxicity

1 % of the mixture consists of ingredient(s) of unknown toxicity  
0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity  
0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity  
1 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)  
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)  
0 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

#### Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Limestone 1317-65-3	>5000 mg/kg (rat)	-	-
Carbonic acid, magnesium salt (1:1) 546-93-0	>2000 mg/Kg Rat	-	-
1,2-Propylene glycol	= 20 g/kg ( Rat )	LD50 > 2000 mg/kg ( Rabbit )	LC50 (4h) >44.9 mg/L (Rat)

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57-55-6			
2-(Dimethylamino)ethanol 108-01-0	= 1803 mg/kg ( Rat )	= 1220 mg/kg ( Rabbit ) = 1370 µL/kg ( Rabbit )	= 1641 ppm ( Rat ) 4 h
Quartz 14808-60-7	>2000 mg/kg ( Rat )	-	-

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

<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	The table below indicates whether each agency has listed any ingredient as a carcinogen. As Quartz (14808-60-7) 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
Quartz 14808-60-7	A2	Group 1	Known	X

### ACGIH (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

### IARC (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

### NTP (National Toxicology Program)

Known - Known Carcinogen

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

X - Present

<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	No information available.
<b>Target Organ Effects</b>	Eyes, Skin.
<b>Subchronic Toxicity</b>	No information available.
<b>Neurological Effects</b>	No information available.
<b>Other Adverse Effects</b>	No information available.
<b>Aspiration hazard</b>	No information available.

## 12. Ecological Information

### Ecotoxicity

Chemical name	Algae/aquatic plants	Fish	Toxicity to Microorganisms	Crustacea
Limestone 1317-65-3	CE50 (72h) >200mg/L Algae (Desmondesmus subspicatus)	CL50 (96h) >10000mg/L Fish (Oncorhynchus mykiss)	-	CE50 (48h) >1000 mg/L Daphnia Magna

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1,2-Propylene glycol 57-55-6	EC50: =19000mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =710mg/L (96h, Pimephales promelas) LC50: =51600mg/L (96h, Oncorhynchus mykiss) LC50: 41 - 47mL/L (96h, Oncorhynchus mykiss) LC50: =51400mg/L (96h, Pimephales promelas)	-	EC50: >10000mg/L (24h, Daphnia magna) EC50: >1000mg/L (48h, Daphnia magna)
2-(Dimethylamino)ethano l 108-01-0	EC50: =35mg/L (72h, Desmodesmus subspicatus)	LC50: =81mg/L (96h, Pimephales promelas)	-	EC50: =98.77mg/L (48h, Daphnia magna)

**Persistence and degradability** No information available.

**Bioaccumulative potential** No information available.

Chemical name	Partition coefficient
Limestone 1317-65-3	0.9
1,2-Propylene glycol 57-55-6	-1.07
2-(Dimethylamino)ethanol 108-01-0	-0.55

**Mobility in soil** No information available

**Other Adverse Effects** No information available.

## 13. Disposal Considerations

### Waste treatment methods

**Waste from residues/unused products** 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** 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



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## 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)

## International 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.

## 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)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

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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**