

PRODUCT DATA

3 03 01 00 Maintenance of Concrete

SEWER GUARD® TG EPOXY LINER

Trowelable, chemical-resistant epoxy mortar

Description

Sewer Guard® TG Epoxy Liner is a three-component, trowelable epoxy mortar with chemical and abrasion resistance. It is used to protect and waterproof overhead, vertical, and nontraffic-bearing concrete and masonry surfaces.

Yield

23 – 25 ft² per kit at 1/8"
(2 – 2.3 m² per kit at 3 mm)

Packaging

No. 1 kit packed in a 5 gallon (19 L) pail, containing

Part A Base:

1 gallon (3.8 L) can

Part B Hardener:

0.5 gallon (1.9 L) can

Part C Aggregate:

20 lb. (9 kg) bag

Shelf Life

2 years when properly stored

Storage

Store in unopened containers at 60 to 80° F (16 to 27° C) in clean, dry conditions.

Features

- Good adhesion to dry concrete
- Waterproof barrier
- Epoxy chemistry
- Trowelable
- 100% solids

Benefits

- Will not delaminate under stress
- Ideal for below-grade applications
- Excellent resistance to hydrogen sulfide, many industrial chemicals
- Simple application in confined spaces
- No VOC; low-odor applications

Where to Use

APPLICATION

- Brick, concrete block, or precast-concrete manholes
- Wet wells and lift stations
- Patching and resurfacing

LOCATION

- Overhead, vertical, and nontraffic-bearing horizontal surfaces
- Exterior below grade or interior

SUBSTRATE

- Concrete and masonry

How to Apply

Surface Preparation

1. Surface must be clean, structurally sound, and fully cured for 28 days. Remove any loose or unsound brick or concrete.
2. Surfaces must be entirely free of oil, grease, paint, detergents, rust, or other surface contaminants. Remove asphalt and oil contaminants with detergents and rinse thoroughly with water.

3. Abrade by abrasive blast or other mechanical-scarification technique to profile of ICRI CSP 4 and then rinse thoroughly with water.
4. Before applying Sewer Guard® TG Epoxy Liner, stop all active hydrostatic water leaks with MBT Protection and Repair Plug, a hydraulic cement.
5. Patch all substrate surfaces requiring repairs in excess of 1/2" (13 mm) deep with SP15 Spray Mortar, either by spray or trowel application.
6. For vertical concrete surfaces in need of complete reprofiling, apply SP15 Spray Mortar by the wet-spray or trowel process in depths of 1/2 – 4" (13 – 102 mm). Allow SP15 Spray Mortar to cure for up to 6 hours at 70° F (21° C) and 50% relative humidity. Refer to the appropriate product data sheet for detailed instructions.
7. All surfaces must be clean and may be dry or damp before the application of Sewer Guard® TG Epoxy Liner.

Technical Data

Composition

Sewer Guard® TG Epoxy Liner is a three-component, epoxy mortar.

Typical Properties

PROPERTY	VALUE
Pot life , approx hrs, at 70° F (21° C)	2
Cure time , hrs, at 70° F (21° C)	
Initial set	4 hrs
90% strength	7 days
Final strength	14 days
Maximum service temperatures , cured, ° F (° C)	
Wet	120 (49)
Dry	180 (82)

Test Data

PROPERTY	RESULTS	TEST METHODS
Compressive strength (filled) , psi (MPa)		ASTM C 579
7 days	9,200 (63)	
30 days	11,300 (78)	
Tensile strength (filled) , psi (MPa)		ASTM C 307
7 days	1,800 (12.4)	
30 days	1,900 (13)	
Flexural strength (filled) , psi (MPa)		BS6319
7 days	4,200 (29)	
30 days	4,200 (29)	
Adhesion , psi (MPa), at 7 days		ASTM D 4541
Dry concrete	> 200 (1.4); substrate failure	
Damp concrete	> 250 (1.7); substrate failure	

All application and performance values are typical for the material, but may vary with test methods, conditions, and configurations.

Chemical Resistance

CHEMICAL	RESULTS
10% sulfuric acid at 122° F (50° C) for 100-days immersion time	Resistant*

*No physical changes were noted in the appearance of the specimen after immersion.

Mixing

1. Sewer Guard® TG Epoxy Liner is supplied in factory premeasured kits. To mix, pour Part A Base and Part B Hardener into a clean pail. Do not mix more material than can be applied within pot life.
2. Mix thoroughly with a steel paddle on a low-speed drill (400 – 600 rpm) for approximately 3 minutes until the material has a uniform color and gel-like consistency.
3. Slowly mix Part C Aggregate into premixed gel, continuing to mix until consistency is uniform.
4. Once a uniform nonsag mortar consistency has been reached and application is underway, do not remix. Do not thin with solvents.

Application

1. Apply 1/8" (3 mm) in thickness with spatula or steel trowel when material, surface, and ambient temperatures are 45° F (7° C) and rising.
2. To avoid sagging on vertical and overhead surfaces, do not apply mortar greater than 3/4" (19 mm) per layer. Build up to desired level and strike off.
3. Do not apply Sewer Guard® TG Epoxy Liner once it has started to set up.

Clean Up

Clean equipment with lacquer thinner or xylene. Cured material must be removed mechanically. Clean hands with soap and water, not solvent.

For Best Performance

- Temperature variations affect nonsag properties of this product. Higher temperatures may cause the product to sag; lower temperatures will decrease workability by causing the product to thicken.
- Do not thin; solvents will prevent proper curing.
- Store aggregate, epoxy base, and hardener at a minimum temperature of 70° F (21° C) for 24 hours before using.
- Make certain the most current versions of product data sheet and MSDS are being used; call Customer Service (1-800-433-9517) to verify the most current version.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

Health and Safety

SEWER GUARD® TG EPOXY LINER PART A

Warning

Sewer Guard® TG Epoxy Liner Part A contains epoxy resin, alkyl (C11-C14) glycidyl ether

Risks

May cause skin, eye and respiratory irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Ingestion may cause irritation.

Precautions

KEEP OUT OF THE REACH OF CHILDREN. Use only with adequate ventilation. Avoid contact with skin, eyes and clothing. Keep container closed when not in use. Wash thoroughly after handling. DO NOT take internally. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION. Refer to Material Safety Data Sheet (MSDS) for further information.

Proposition 65

This product does not knowingly contain materials listed by the State of California as known to cause cancer, birth defects or other reproductive harm.

VOC Content

0 g/L or 0 lbs/gal less water and exempt solvents when components are mixed and applied per Manufacturer's instructions.

SEWER GUARD® TG EPOXY LINER PART B

Danger—Corrosive

Sewer Guard TG Epoxy Liner Part B contains petroleum distillates; isophorone diamine ; 2,4,6-tris((dimethylamino)methyl)phenol ; triethylenetriamine; silica, crystalline quartz

Risks

Contact with skin or eyes may cause burns. Ingestion may cause irritation and burns of mouth, throat and stomach. Inhalation of vapors may cause irritation. May cause dermatitis and allergic responses. Potential skin and/or respiratory sensitizer. Repeated or prolonged contact with skin may cause sensitization. Contains crystalline silica. NTP and IARC recognize respirable crystalline silica as a human carcinogen. The exposure to crystalline silica during the normal use of this product will be little or none. Reports associate repeated or prolonged occupational overexposure to solvents with permanent brain, nervous system, liver and kidney damage. INTENTIONAL MISUSE BY DELIBERATELY INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.

Precautions

DO NOT get in eyes, on skin or clothing. Wash thoroughly after handling. Keep container closed. DO NOT take internally. Use only with adequate ventilation. DO NOT breathe vapors. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

Refer to Material Safety Data Sheet (MSDS) for further information.

Proposition 65

This product contains material listed by the State of California as known to cause cancer, birth defects or other reproductive harm.

VOC Content

0 g/L or 0 lbs/gal less water and exempt solvents when components are mixed and applied per Manufacturer's instructions.

SEWER GUARD® TG EPOXY LINER PART C

WARNING!

Sewer Guard TG Epoxy Liner Part C contains silica, crystalline quartz.

Risks

May cause skin, eye or respiratory irritation. Ingestion may cause irritation. Contains small free respirable quartz which has been listed as a suspected human carcinogen by NTP and IARC. Repeated or prolonged overexposure to free respirable quartz may cause silicosis or other serious and delayed lung injury.

Precautions

Avoid contact with skin, eyes and clothing. Prevent inhalation of dust. Wash thoroughly after handling. Keep container closed when not in use. DO NOT take internally. Use only with adequate ventilation. Use impervious gloves, eye protection and if the TLV is exceeded or used in a poorly ventilated area, use NIOSH/MSHA approved respiratory protection in accordance with applicable Federal, state and local regulations.

First Aid

In case of eye contact, flush thoroughly with water for at least 15 minutes. In case of skin contact, wash affected areas with soap and water. If irritation persists, SEEK MEDICAL ATTENTION. Remove and wash contaminated clothing. If inhalation causes physical discomfort, remove to fresh air. If discomfort persists or any breathing difficulty occurs or if swallowed, SEEK IMMEDIATE MEDICAL ATTENTION.

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**For medical emergencies only,
call ChemTrec (1-800-424-9300).**

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