

VC-1291 EXTREME HEAT: POLYUREA CRACK FILLER

TECHNICAL DATA SHEET (TDS)

Description

VC-1291-EX is a two parts, high penetration, fast setting, hybrid polyurea for repairing and re-building damaged concrete. The product is a 1:1 ratio, easy to mix system that is 98 % solids and VOC compliant. The VC-129-EX can be used to set anchor bolts, repair damaged control joints, fill spalling, and rebuild vertical curbing and steps. Sand or gravel can be added to extend the volume of the material and acts as filler for repairing large spalls, holes and cracks.

Primary Applications

Vital Coat VC-1291-EX is an excellent choice for many applications.

- Car washes or wash bays
- Garage floors
- Low temperature equipment
- Maintenance facility floors
- Industrial shop floors
- Commercial freezer repairs
- Bridges/Street repairs
- Aircraft hangar floor
- Leveling and grade matching
- Concrete Polishing
- Non-moving control joint fill
- Forming/rebuilding stairs and steps

Features/Benefits

- Application temperature between 23°F to 100.4°F (-5°C to 38°C)
- Self-leveling and self-priming
- Excellent for industrial floor repairs subject to forklift
- Product cures in 10 minutes @ 71.6°F (22°C) with excellent adhesion
- Ready to service in 10 to 20 minutes
- Highly chemical resistant

Technical Information

Property	Result
Mix Ratio, By Volume	A:B = 1:1
Mix Ratio, By Weight	A:B = 100:118
Pot Life (3.5oz)	2-3 minutes @77° (25 C°)
Volume Solids % By Weight	Part A:50% (85% Catalyzed) - Part B: 69% (85% Catalyzed)
Density (KG/L)	Part A:0.94 - Part B: 1.12 - Mixed: 1.11
Tack Free Time @77°F 50% RH	15 Minutes
VOC Content	509 g/L
Flash Point	100°F

Properties

Property	Result
Tensile Strength (PSI), ASTM D638	4500-4800
Bond Strength (PSI), ASTM D4541	1900-2300
Hardness (Shore D), ASTM D2240	68-72
Viscosity @ 77°F (25°C)	Part A:15-30 CPS - Part B:15-30 CPS - Mix: 15-30 CPS
Compressive Strength (PSI MPA), ASTM D695	5600
Elongation at Break, ASTM D638	6-8%

Note* Times are approximate and will be affected by changing ambient conditions, especially changes in temperature and relative humidity. High temp or humidity cause faster cure.

Packaging

This product is available in 2 US gal Kit (7.57L) or 10 US gal Kit (37.8L)

Coverage/Thickness

Varies

Note* The indicated coverage is calculated for flat surfaces. A porous surface will require more material in order to cover the same area.

Shelf Life

This product has a shelf life of up to one year in its original, sealed, unopened container. Store in a dry cool place between 50 and 89°F. If product appears to be hardened or separated contact Vital Coat before use. Keep away from extreme cold, heat or moisture. Keep out of direct sunlight and away from fire hazards.

Directions for Use

Surface Preparation: Surfaces must be dry, structurally sound, free of dust, dirt, and all other contaminants.

Concrete surface must be clean, sand blasting, diamond grinder w//30 grit or coarse, or water blasting is highly recommended to remove surface contaminates. Any oils or fats must be removed prior to product application. The surface must be primed and allowed to dry before the application of the product. Compression resistance of concrete must be at least 25 MPa (3625 lbs./inch²) after 28 days and traction resistance must be at least 1,5 MPa (218 lbs./inch²). Do not apply to wet substrates. Chloride, moisture, and pH levels should be checked prior to application. In almost every application, a primer is recommended prior to use.

Mixing:

Mix 1 part "A" to 1 part "B" into a clean pail using a Jiffy-type mixer carefully to not entrain air or moisture into the mix. Move mixer around in pail for not more than 30 seconds. Only mix as much product as can be placed within the duration of the pot life.

Application:

Apply and pour the mixed product on the prepared surface.

Drying/Cure Times

Hard Dry	5-10 minutes @72° (22 C°) - 54% Humidity
Foot Traffic	10 minutes @72° (22 C°) - 54% Humidity
Full Cure	30 minutes @77° (25 C°)

Note* Times are approximate and will be affected by changing ambient conditions, especially changes in temperature and relative humidity.

Curing: Do not touch treated surface during curing. Do not add water or allow water to come in contact while curing. Protect surface from debris coming in contact with surface while drying.

Clean-up

Clean all application equipment with a specified cleaner. Once the material hardens it can only be removed mechanically. If the product splatters, wash thoroughly with hot soapy water.

Precautions/Limitations

Minimum/Maximum temperature of substrate: 50°F / 86°F (10°C / 30°C)
Maximum relative humidity during application and curing: 85 %
Substrate temperature must be 5.5°F (3°C) above dew point measured
Humidity content of substrate must be < 4 % when coating is applied
Avoid exterior use on substrates at ground level

Health and Safety

Always wear proper safety equipment to protect eyes and skin. Keep a neat, clean mixing area to avoid potential safety issues. Make sure to read and understand all SDS sheets and become familiar with all application procedures and best practices. Recommended for use by professionals only!

In case of skin contact, wash with water and soap. In case of eye contact, immediately rinse with water for at least 15 minutes. Consult with a doctor. For respiratory problems, transport victim to fresh air. Remove contaminated clothes and clean before reuse. For more information, consult the material safety data sheet.

Components A and B contain toxic ingredients. Prolonged contact of this product with the skin is susceptible to provoke an irritation. Avoid eye contact. Contact with may cause serious burns. Avoid breathing vapors release from this product. This product is a strong sensitizer. Wear safety glasses and chemical resistant gloves. A breathing apparatus filtering organic vapors approved by the NIOSH/MSHA is recommended. Predict suitable ventilation.

Important Notice

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Publish Date

6/23/2020

Revisions

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