AVANTI
Stop leaks. Stabilize soil.
Control groundwater. Permanently.

TECHNICAL DATA SHEET

AV-522 Crack Sealing Paste™

High-Bond Strength Epoxy Crack Sealing Paste

Description

AV-522 Crack Sealing Paste™ is a two-component, non-sag structural epoxy designed to provide exceptional bond strength for concrete crack sealing and surface repair applications. Its non-sag consistency makes it ideal for capping (surface sealing) cracks prior to epoxy injection as well as performing general surface repairs. AV-522 is 100% solids, VOC free, and Butyl Glycidyl Ether (BGE) free.*

AV-522 meets or exceeds requirements of ASTM C881 and AASHTO M 235 (Types I, II, IV, & V, Grade 3, Class B & C).

Applications

- Capping (surface sealing) cracks prior to epoxy injection
- Sealing injection ports during crack injection
- General concrete surface repairs

Features & Benefits

- Non-sag, non-shrink
- User friendly mix ratio 1:1 by volume
- Solvent free
- Butyl Glycidyl Ether (BGE)*free
- High Strength/Modulus
- Easy to apply paste
- Excellent adhesion
- ASTM C881 compliant

How AV-522 Works

AV-522 Crack Sealing Paste has a user-friendly mixing ratio of 1:1 by volume. Use AV-522 to surface seal (cap) crack before using Avanti's AV-502-LV Injectable Bonding Epoxy LV for manual or automatic injection.

Packaging – *Packaging size does not mean fill volume

- Dual Cartridge (Qty: 6) - Part A: 10.14 fl. oz. (300 ml), Part B: 10.14 fl. oz. (300 ml)

Physical Properties*

UNCURED AV-522 – Resin (Part A) and Hardener (Part B)		
Appearance	Gray	
Viscosity (Parts A+B)	Non-sagging paste	
Flash Point (Part A)	≥302°F / ≥150°C	
Flash Point (Part B)	>200 °F / >93°C (Closed Cup)	
Solids	100%	
Specific Gravity (Parts A+B)	1.43 @ 72°F / 22°C	
Density	11.93 lbs./gal 1,430 kg/m^3	
Gel Time (Class B)	20 minutes @ 50°F / 10°C	ASTM C881
Gel Time (Class C)	10 minutes @ 73°F / 23°C	ASTM C881
CURED AV-522		
Consistency (Class B)	0.0 in @ 50°F / 10°C	ASTM C881
Consistency (Class C)	0.0 in @ 73°F / 23°C	ASTM C881
2-Day Bond Strength (Class B) (Hardened to Hardened Concrete)	1,167 psi @ 40°F / 4°C	ASTM C882
2-Day Bond Strength (Class C) (Hardened to Hardened Concrete)	2,006 psi @ 60°F / 16°C	ASTM C882
14-Day Bond Strength (Class B) (Hardened to Hardened Concrete)	2,450 psi @ 40°F / 4°C	ASTM C882

822 Bay Star Blvd. Webster, TX 77598 USA | 800.877.2570 | support@avantigrout.com | avantigrout.com

14-Day Bond Strength (Class C) (Hardened to Hardened Concrete)	2,876 psi @ 60°F / 16°C	ASTM C882
14-Day Bond Strength (Fresh to Hardened Concrete)	1,583 psi @ 73°F / 23°C	ASTM C882
Absorption	0.1% @ 73°F / 23°C (24 hours)	ASTM D570
Heat Deflection	124°F / 51°C	ASTM D648
Compressive Strength (Class B)	10,880 psi (75 MPa) @ 40°F / 4°C	ASTM D695
Compressive Strength (Class C)	13,735 psi (95 MPa) @ 60°F / 16°C	ASTM D695
Compressive Modulus (Class B)	245,588 psi (1,693 MPa) @ 40°F / 4°C	ASTM D695
Compressive Modulus (Class C)	281,660 psi (1,942 MPa) @ 60°F / 16°C	ASTM D695
Tensile Strength	4,400 psi (30 MPa)	ASTM D638
Elongation @ break	1.0%	ASTM D638
Linear Coefficient of Shrinkage	0.004 in/in	ASTM D2566
Hardness Shore D	88	ASTM D2240

** Laboratory results*

Surface Preparation
To achieve excellent adhesion, the substrate should be free of all loose and foreign material and should be clean. Oils, grease, waxes or other contamination must be removed prior to application. Be sure the crack is open where ports are placed. Set ports with Avanti's non-corrosive AV-522 Crack Sealing Paste.

Mixing Guidelines
For best performance, the ideal application temperature range is between 70-80°F (21-32°C) but can be extended between 60-100°F (16-38°C). Mix one part Resin (Part A) to one part Hardener (Part B) for three minutes using a Jiffy Mixer and a slow speed drill. Mix at slow speed (less than 500 rpm) to avoid air entrainment. DO NOT mix more material than can be used within the stated working time. REMEMBER - you will have less working time with larger mixing quantities and higher temperatures.

Cleaning
AV-522 may be removed from tools with Avanti's AV-208 Technical Grade Acetone™ or warm soapy water before they are fully cured. Use AV-222 Cleaner™ to remove cured epoxy from tools by soaking the tools in AV-222 for extended time.

- AV-208 Technical Grade Acetone™ – removes uncured resin from equipment
- AV-222 Cleaner™ – removes cured resin from equipment

Storage
Store between 60°F-80°F (15°C-27°C) in a dry atmosphere. Keep containers closed. Temperatures below 60°F (16°C) may cause partial crystallization of the resin. If crystallization has occurred, heat the resin in its original container, placing it into another container with hot water. Do not use open flame as a heat source to warm the product.

Safety
Always use OSHA-approved personal protective equipment (PPE). Refer to the SDS for complete safety precautions. The Safety Data Sheets and Mixing Guidelines are available 24/7 at avantigrout.com.

Shipping – Motor and Air Freight available

- Resin: Not Regulated
- Hardener: UN3259, Amines, solid, corrosive, n.o.s. (Aliphatic amine, Diethylenetriamine)

Notice
The data, information and statements contained herein are believed to be reliable but are not construed as a warranty or representation for which Avanti International assumes any legal responsibility. Since field conditions vary widely, users must undertake sufficient verification and testing to determine the suitability of any product or process mentioned in this or any other written material from Avanti for their own particular use. NO WARRANTY OF SUITABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE. In no case shall Avanti International be liable for consequential, special, or indirect damages resulting from the use or handling of this product.