

AV-330-NTP Safeguard NTP™

Hydrophilic Polyurethane Grout

Description

AV-330-NTP Safeguard NTP™ is a 100% MDI-based, single component, mid-range viscosity, moisture-activated polyurethane injection resin designed for sealing active leaks in below-grade structures. AV-330-NTP permeates well in various medium size cracks and joints and offers added safety in confined spaces or where there is poor ventilation. Cures tough, flexible and closed-cell.

Applications

- Areas with poor ventilation or confined spaces such as utility vaults, sub-grade pump houses, lift stations, mines, tunnels, and basements
- Medium cracks or joints in concrete structures
- Great for manholes and pipe penetrations
- Ideal grout for underwater/diving applications

Features & Benefits

- 100% MDI-based
- Mid-range viscosity penetrates well
- Free rise expands 400% – 600%
- Non-corrosive
- Cures tough, flexible and closed-cell with superb adhesive properties
- Non-acetone equivalent to AV-333 Injectaflex™
- Available as NSF/ANSI/CAN 61 Drinking Water Systems Component Certified
- Multiple grouting techniques including Expanded Gasket Placement Technique (EGP) and Variable Pressure Application Technique (V-PAT) – Crack Injection

How AV-330-NTP Works

AV-330-NTP reacts with moisture to form a durable, flexible seal accomplished by three mechanisms. First the resin seeks out water in the space and pores of the substrate and adheres to the surface. Second, the resin/water reaction begins to expand forming a tight compressive seal and third the network of compressed grout material within all the cracks establishes a mechanical lock. The preferred ratio is 1:1 (water to resin), however pre-mixing is not required. AV-330-NTP is pumped as a single component.

Optional Products

- AV-203 Multicat™ – cream and gel time accelerator (Note: usage of AV-203 is not tested and certified by WQA against NSF/ANSI/CAN 61 Drinking Water System Component)

Packaging – product is packaged by net weight except when indicated

Grout

- Jug – 8.8 lbs. (4.0 kg)
- Pail – 44 lbs. (20 kg)
- Drum – 484 lbs. (220 kg)

Optional Catalyst – AV-203

- Container - 78 fl. oz. (2.31 L)

Physical Properties*

UNCURED	
Appearance	Pale yellow liquid
Viscosity (water=1)	350 – 750 cP @ 72°F (22°C)
Flash Point	>200°F (>93°C)
Specific Gravity (water=1)	1.08 @ 72°F (22°C) ± 3%
Density	9.01 lbs./gal. ± 3% (1.08 kg/L ± 3%)

CURED+		
Appearance	Milky colored, dense, flexible	
Tensile Strength	350-400 psi	ASTM D-3574 Test E
Elongation	300-400%	ASTM D-3574 Test E

* Laboratory results

Performance - General

Gently shake or stir container(s) before using. For the best results, use AV-330-NTP between 60°F – 90°F (16°C – 32°C). Performance will be influenced by site conditions. If site temperatures are low, use a heat source to warm to ~72°F (22°C) and apply. Do not use open flame as a heat source. At temperatures of 45°F (7°C), the viscosity of the product can significantly increase, making the miscibility with the reaction-water more difficult. The times presented are laboratory results. Actual results may be different in the field due to site water used or site conditions. Perform a standard cup test with site water to determine the desired reaction time.

Performance Using AV-330-NTP

See Table below for approximate Cream/Gel (Cure) Times for AV-330-NTP.

Cream / Gel (Cure) Times for AV-330-NTP Safeguard (Min:Sec) * 1,2		
		1:1 Water/AV-330
Temperature	40°F / 4°C	0:47 / 6:28
	50°F / 10°C	0:37 / 5:00
	60°F / 15°C	0:24 / 4:18
	70°F / 21°C	0:19 / 2:55
	80°F / 27°C	0:17 / 2:18

*Laboratory results

1. Resin and water temperatures may affect cream / gel times.

2. Actual results may be different in the field due to site water used or site conditions.

Performance When Adding AV-203 Multicat

AV-203 Multicat may be used at low temperatures and/or high flow water cut-off situations at a maximum of 78 fl. oz. of AV-203 per pail of AV-330-NTP. When AV-203 is used to slow down high waterflows, it should not be used as a stand-alone solution but in conjunction with any of Avanti's hydrophobic or hydrophilic polyurethane resins. See Table below for approximate Cream/Gel (Cure) Times AV-330-NTP used with AV-203.

Cream / Gel (Cure) Times for AV-330-NTP Safeguard NTP + AV-203 Multicat (Min:Sec)			
		1:1 Water/AV-330-NTP + Half Catalyst (Resin:Catalyst, 16:1)	1:1 Water/AV-330-NTP + Full Catalyst (Resin:Catalyst, 8:1)
Temperature	40°F/4°C	N/A / 0:52	N/A / 0:37
	50°F/10°C	N/A / 0:40	N/A / 0:31
	60°F/15°C	N/A / 0:36	N/A / 0:28

*Laboratory results

Note: Do not use more than one container of AV-203 catalyst per pail of AV-330-NTP.

1. Resin and water temperatures may affect cream / gel times.

2. Actual results may be different in the field due to site water used or site conditions.

Cleaning

Do not use water to clean equipment. AV-330-NTP is water activated and will setup or cure in your hoses and equipment. Flush with AV-284 Pump Wash™ to remove uncured resin in hoses and equipment. Purge equipment and hoses with AV-208 Technical Grade Acetone™ before use to remove any remaining AV-284 and moisture.

- AV-208 Technical Grade Acetone™ – removes moisture from equipment
- AV-222 Cleaner™ – removes cured resin from equipment
- AV-284 Pump Wash™ – removes uncured resin from pump hose

Storage

Store in temperatures within or near 45°F – 95°F (7°C – 35°C) in a dry atmosphere. Keep container tightly closed when not in use. Packaged under dry nitrogen to keep moisture out and extend shelf life. Storage of opened/partial containers at the lower range of the recommended storage temperature is not advised as moisture in the air above a partial container might condensate and might cause the grout to premature gel in the container. Avanti does not recommend storing full or partially filled containers of AV-330-NTP that have been catalyzed or mixed with AV-203. Catalyzed grout may react over time or if not stored correctly.

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

- Not regulated under US DOT Regulations

Notice

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