

Thixoflex Black® Injectable Sealant

Thixoflex Black® is a two-component polyurea material designed for use as a durable, watertight sealant. The high viscosity allows for easy application where vertical and overhead application is desirable. The system demonstrates excellent adhesion to itself (cohesion) and allows for easy removal when necessary. Similar to TG8498 and TG2010, with increased bonding strength and improved UV resistance, as well as a quicker gel time across a wide temperature range. **Thixoflex Black®** is intended to be used as a fast-curing perimeter sealant, gap sealant or faying surface sealant. Common uses including sealing of antennas, lights, panels, leading edges cock pit windows and passenger windows.



Thixoflex Black® applied as a quick-cure fillet seal

Feature	Benefit
Provides a high level of adhesion to most substrates	Moisture barrier, corrosion protection, improved reliability, reduced repair/scrap
Ease of installation	High viscosity and cohesive properties assure proper sealing, even on vertical and overhead applications
No hazardous materials when removed	Non-hazardous polyurethane materials leave no residue before, during, or after installation
Fluid Resistance	Excellent resistance to typical aircraft fluids encountered on the exterior surfaces including Jet A, lubricating oils and de-icing fluids. Also demonstrates good resistance to most hydraulic fluids



Thixflex Black® injected around cock pit windows



Thixflex Black® installed in panel to create water tight seal

Typical Physical Properties

Thixoflex Black® Part Numbers	TG3212-50 (50 cc cartridge) TG3212-200 (200 cc cartridge)
Reaction Ratio (by Weight)	100 : 96.1 Resin to Hardener
Reaction Ratio (by Volume)	100 : 100
Color, Resin	Amber
Color, Hardener	Black
Color, Properly Mixed	Black
Specific Gravity, Resin, at 77°F (25°C)	1.10 to 1.13
Specific Gravity, Hardener, at 77°F (25°C)	1.06 to 1.08
Specific Gravity, Mixed, at 77°F (25°C)	1.08 to 1.10
Viscosity, Resin, cps at 77°F (25°C)	4,500 to 7,500
Viscosity, Hardener, cps at 77°F (25°C)	32,000 to 47,000
Gel Time at 77°F (25°C)	<8 minutes
Full Cure at 77°F (25°C)	<2 hours
Working Life at 77°F (25°C)	<4 minutes
Hardness at 77°F (25°C)	Shore "A" 70 to 90
Dielectric Strength	>427 volts/mil
Storage Temperature	>55.4°F (13°C)
Shelf Life, Sealed Container	Six months (in original packaging and used within 24 hours after opening)
Service Temperature Guide	-85°F to 185°F (-65°C to 85°C)
Application Temperature	>55.4°F (13°C)
Peel Strength	>25 piw
Tensile Strength (ASTM D412)	>600 PSI
Salt Fog 3000hrs (ASTM B117)	No Corrosion Present
SDS	SDS information can be requested at info@avdec.com

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