Product Information Sheet



Thixoflex Black®

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, **Thixoflex Black**® exhibits 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)
Color, Properly Mixed	Black
Reaction Ratio - by Volume	100:100
Specific Gravity, Mixed, at 77°F / 25°C (Calculated)	1.08 to 1.10
Viscosity, Resin, Cps. at 77°F / 25°C (ASTM D2556)	4,500 to 9,500
Viscosity, Hardener, Cps. at 77°F / 25°C (ASTM D2556)	14,000 to 55,000
Working Life at 77°F / 25°C	< 4 minutes
Gel Time, 10 g Mass at 77°F / 25°C (ASTM D7997)	< 15 minutes
Shelf Life - in original packaging and store above 55°F / 13°C	Nine months
Storage Temperature	> 55.4°F / 13°C
Service Temperature Guide (RTCA DO-160G, Section 5, 2 cycles)	-85°F to 185°F / -65°C to 85°C
Application Temperature	> 55°F / 13°C
Hardness, Shore "A" @ 77°F / 25°C @ 24 hours (ASTM D2240)	> 70
Dielectric Strength (ASTM D149 Method A)	> 400 V/mil
Tensile Strength (ASTM D412)	> 920 PSI
Elongation (ASTM D412)	>300%
SDS	SDS information can be requested at info@avdec.com

Aviation Devices & Electronic Components L.L.C. (Av-DEC) believes that the information contained herein is accurate as of the date of issue. NO WARRANTY EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, FOR FITNESS FOR ANY PURPOSE, MERCHANTABILITY OR ANY OTHER WARRANTY, IS MADE CONCERNING THE PRODUCT AND INFORMATION PROVIDED HEREIN. NO ONE ACTING FOR OR ON BEHALF OF AV-DEC is AUTHORIZED OR IMPLIED WARRANTY REGARDING THE PRODUCT AND INFORMATION PROVIDED HEREIN. In no event shall Av-DEC's liability for any breach of warranty exceed the purchase price of the material as to which a claim is made. Further, since the conditions and methods of use are beyond the control of Av-DEC, Av-DEC expressly disclaims any and all liability as to any results obtained or arising from any use of this product or reliance on such information provided herein. Rather, buyers and users of the product and information provided herein are responsible for all loss or damage from use or handling of this product and information provided herein, including, but not limited to, incompatibility with other products, weather conditions, environmental conditions, and those conditions which are outside the ranges of appropriate industrial practice. The information provided herein, and the product, are furnished on the condition that the persons receiving them shall make their own determination as to the suitability of the product for their particular purpose and on the condition that they assume the entire risk of their use. In addition, no authorization is given nor implied to practice any patented invention without a license.

-Av-DEC PROPRIETARY-

NOTICE – This report and any attachments thereto contains Proprietary Information of Aviation Devices and Electronic Components LLC (Av-DEC). This report is the property of Av-DEC, and any disclosure of its contents to others is given in confidence. This information must not be disclosed, reproduced or copied, in whole or in part, or used in any way without the specific written approval and permission of Av-DEC.