

June, 2018

3M™ Scotch-Weld™ One-Part Epoxy Adhesive 6100LV Black

Product Description

3M™ Scotch-Weld™ One-Part Epoxy Adhesive 6100LV Black is a low viscosity one-part epoxy exhibiting low temperature cure or fast high temperature cure with long room temperature pot life. This epoxy is flexible and toughened to minimize stress on small joints with CTE mismatch.

Product Features

- Low viscosity for wicking into small spaces
- One-part with stability at room temperature
- Low temperature cure and fast cure options
- Flexible
- Water Resistant

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Technical Information Note

The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Typical Uncured Physical Properties

Property	Values	Notes	Test Condition
Components	1-Part		
Color	Black		
Viscosity	≈1,500 cP	Cone and Plate, RT, 5Hz, 25mm SS plates, 0.0989 rad cone	
Viscosity	≈1,000 cP	Brookfield spindle #27 50RPM	
UV Tracer	No		
Halogens (Cl, Br)	Low halogen as defined by the Electrotechnical Commission (IEC) 61249-2-21 Standard	Per IEC 61249-2-21	
Pot Life	>4 weeks	Time to double viscosity measure by cone and plate rheometer.	Room Temperature

Typical Mixed Physical Properties

Property	Values	Test Condition	Notes
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Typical Mixed Physical Properties (continued)

Property	Values	Test Condition	Notes
Cure Time	≈30 min	149°F(65°C)	Time to 90% cure by differential scanning calorimetry (DSC). Includes ramp time to temperature.
Cure Time	≈4 min	194°F(90°C)	Time to 90% cure by differential scanning calorimetry (DSC). Includes ramp time to temperature.

Typical Performance Characteristics

Property	Values	Method	Notes
Tensile Strength	5 MPa	ASTM D638	Type V dogbone. Jaw separation 2 in/min, tested at 25°C / 50%RH.
Elongation	350 %	ASTM D638	Type V dogbone. Jaw separation 2 in/min, tested at 25°C / 50%RH.
Young's Modulus	2 MPa	ASTM D638	Type V dogbone. Jaw separation 2 in/min, tested at 25°C / 50%RH.
Modulus via DMA	6.5 MPa		3°C/min ramp, 1Hz film tension mode

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Typical Performance Characteristics (continued)

Property	Values	Method	Notes
Water Resistance	Passed up to 2.5M		Tested on 3inx6in PC parts, dispensed in a thin bond line frame around the perimeter about 10mm distance from the edge. Used 3M™ water indicator dots within adhesive frame to confirm no moisture leakage. This is not tested to IPX8 standard test.

Available Sizes

Packaging: 30 mL syringes

Handling/Application Information

Application Ideas

- Mobile device bonding
- Wearable electronic device bonding
- Electronics Assembly

Application Techniques

- Dispensing
- Jetting

Directions for Use

Thaw for one to two hours at room temperature before using. Do not heat syringe above 27°C when warming.

Storage and Shelf Life

The shelf life of 3M™ One-Part Epoxy Adhesives 6100LV Black is 18 months from the date of manufacture when stored in the original packaging materials and stored at -20°C (-4°F).

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Certificate of Analysis (COA)

The 3M Certificate of Analysis (COA) for this product is established when the product is commercially available from 3M. The commercially available product will have a COA specification established. The COA contains the 3M specifications and test methods for the products performance limits that the product will be supplied against. The 3M product is supplied to 3M COA test specifications and the COA test methods. Contact your local 3M representative for this product's COA.

This technical data sheet may contain preliminary data and may not match the COA specification limits and/or test methods that may be used for COA purposes.

Safety Data Sheet: Consult Safety Data Sheet before use.

Regulatory: For regulatory information about this product, contact your 3M representative.

Trademarks

3M is a trademark of 3M Company

References

1. Safety Data Sheet

Url: https://www.3m.com/3M/en_US/company-us/SDS-search/results/?gsaAction=msdsSRA&msdsLocale=en_US&co=ptn&q=6100LV Black

Technical Information

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