

Advanced Materials**Uralane[®] 5759-G/D****POLYURETHANE ADHESIVE**

- Sprayable for Bonding Plastics
- Self Extinguishing

DESCRIPTION

Uralane[®] 5759-G/D polyurethane adhesive is a sprayable, two-part, self-extinguishing system for bonding engineering-grade plastics such as acrylics, polycarbonates, ULTEM* and DECLAR** Uralane 5759-G/D polyurethane adhesive is a thixotropic adhesive that develops high green strength at 75°F (23°C) within 15-20 minutes. Uralane 5759-G/D polyurethane adhesive is qualified to BMS 5-105 Type III and is suitable for aircraft interior applications with stringent flammability requirements.

TYPICAL PROPERTIES AS RECEIVED

<u>Property</u>	<u>5759-G Resin</u>	<u>5759-D Hardener</u>	<u>5759-G/D System</u>	<u>Test Method</u>
Color	Off-White	Off-White	Off-White	Visual
Density, g/cc.	1.40	1.00	1.20	ASTM-D-792
Viscosity, cP at 77°F (25°C)	23,000	5,000	Thixotropic	ASTM-D-2196
Gel time, 100 gms at 77°F (25°C), minutes	--	--	4-8	ASTM-D-2471
Shelf life ⁺ at 77°F (25°C), unopened, months	6	6	--	--

⁺ See storage and handling information on page two.

MIX RATIO

To 100 parts by weight Uralane 5759-G resin, add 19 parts by weight of Uralane 5759-D hardener. Stir each component thoroughly before using. Mix both components thoroughly for one minute. This product has a very quick set time and must be applied immediately after mixing. It is designed especially for automatic mix and spray equipment with mix ratio of 4:1 parts by volume.

NOTE: Concerning work life - This material should be applied with automatic mix/dispense equipment or Supermix cartridges because viscosity increases rapidly after mixing.

CURE SCHEDULE

48 hours at 77°F (25°C), or gel at 77°F (25°C), plus four hours at 160°F (71°C). Cure may be accelerated with heat.

TYPICAL CURED PROPERTIES (Not for specification purposes)

<u>Test</u>		<u>Result</u>	<u>Test Method</u>
Tensile lap shear, AL/AL, psi (MPa)	at -67°F (-55°C)	5,600 (38.6)	ASTM-D-1002
	at 77°F (25°C)	700 (4.8)	--
	at 180°F (83°C)	300 (2)	--
polycarbonate to polycarbonate	at 77°F (25°C)	450 (3.1)	--
polycarbonate to phenolic-graphite	at 77°F (25°C)	350 (2.4)	--
Climbing drum peel, inch-pounds per inch (N/mm)		13 (2.2)*	ASTM-D-1781
T-Peel strength, pli (N/mm)		10 (1.75)	ASTM-D-1876
Flatwise tensile, 2 in. x 2 in. (5 cm x 5 cm), psi (MPa)*		600 (4.1)	ASTM-C-297
Vertical, 60 second ignition, burn length, inches (cm)		5 (12.5)	BMS 5-105
Polycarbonate, phenolic, Nomex core sandwich, peak HRR, kw/m ²		25	O.S.U.
Hardness, Shore D		25	ASTM-D-2240

*polycarbonate to graphite/phenolic, no decrease after 7 days at 160°F (71°C)

STORAGE :

Uralane[®] 5759-G/D should be stored in a dry place, in the sealed original container, at temperatures between +2°C and +40°C (+35.6°F and 104°F). These products should not be exposed to direct sunlight. Under these storage conditions, and when supplied under Huntsman standard certification, these products have a shelf life of 6 months (expiration date may differ based on customer specification).

DO NOT REFRIGERATE. These products are moisture sensitive and are packaged under a blanket of dry nitrogen. Material temperatures should be above 18°C (65°F) when mixing. After opening a container, re-blanket with dry nitrogen and then tightly reseal.

PRECAUTIONARY STATEMENT :

Huntsman Advanced Materials Americas LLC maintains up-to-date Material Safety Data Sheets (MSDS) on all of its products. These sheets contain pertinent information that you may need to protect your employees and customers against any known health or safety hazards associated with our products. Users should review the latest MSDS to determine possible health hazards and appropriate precautions to implement prior to using this material.

First Aid!

Refer to MSDS as mentioned above.

**KEEP OUT OF REACH OF CHILDREN
FOR PROFESSIONAL**

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Main Offices :

Huntsman Corporation
10003 Woodloch Forest Dr.
The Woodlands
Texas 77380
(281) 719-6000

**Huntsman Advanced Technology
Center**
8600 Gosling Rd.
The Woodlands
Texas 77381
(281) 719-7400