

Uralane[®] 5779 Polyurethane Adhesives

Product Description

Uralane[®] 5779 A/B polyurethane adhesive and other versions of Uralane[®] 5779 polyurethane adhesives are two-component systems which bond well to both plastic and metal substrates. These polyurethane adhesives have a non-flow paste consistency and can be used as sealants or caulking compounds. Uralane[®] 5779 Adhesives are available in several colors and are qualified to BMS-5-105, Type 6I (Beige - Uralane[®] 5779 A80/B, Pepper dust/gray - Uralane[®] 5779 A40/B).

Features

- Caulking compounds
- Convenient 1:1 mix ratio by volume
- Environmental stability under UV light & humidity exposure

Typical Properties*

| Property | Test Method | 5779 Resin | 5779 Hardener | Mixed System |
|----------------------------|-------------|-------------------------------|---------------|------------------------------|
| Appearance | Visual | A - Light Blue A80 - Brown | B - White | A/B - White A80/B - Beige |
| Density, g/cm ³ | ASTM D792 | 1.43 | 1.40 | 1.42 |
| Viscosity at 25°C, cP | ASTM D2196 | 45,000 | 152,000 | Non-sag paste |

*Typical properties are based on Huntsman's test methods. Copies are available upon request.

Processing

Mix Ratio

| Product | Parts by weight | Parts by volume |
|-----------------------------------------|-----------------|-----------------|
| Uralane [®] 5779 A / A80 / A40 | 100 | 1 |
| Uralane [®] 5779 B | 98 | 1 |

Mix both components thoroughly for 2-3 minutes to ensure complete blending. The mix ratio is the same for all color versions of this product. This adhesive is also supplied in twin cartridges with mixing nozzles. For best results, Uralane® 5779 should be dispensed using manual or pneumatic dispensing equipment through a 0.25 in diameter, 20 element static mixing nozzle (Nordson EFD #7701488, or equivalent). Mix only that amount which can be processed in 5 minutes at 77°F (25°C). Material temperatures should be above 18°C (65°F) when mixing.

Processing Data

| Parameter | Value |
|-------------------------------------|---------------------------------|
| Gel time, 100 g at 77°F (25°C), min | 8 - 15 |
| Typical Cure Cycles | 7 days at 23°C or |
| | 3 hours at RT + 4 hours at 66°C |

Typical Physical Properties

Unless otherwise stated, the data were determined with typical production batches using standard test methods. They are typical values only, and do not constitute a product specification.

| Property | Test Method | Value |
|--------------------------------------------|-------------|--------------------------------------------------------|
| Tensile lap shear, psi (MPa) | ASTM D1002 | 1,700 (11.7) 680 (4.7) 480 (3.3) 4,700 (32.4) |
| Aluminum | | |
| 77°F (25°C) | | |
| 180°F (82°C) | | |
| 250°F (121°C) | | |
| -67°F (-55°C) | | 700 (4.8) |
| Polycarbonate | | |
| 77°F (25°C) | | |
| T-peel, at 77°F (25°C), pli (N/mm) | ASTM D1876 | 10 (1.75) 10 (1.75) |
| Aluminum | | |
| Polycarbonate | | |
| Durometer Hardness, Shore D | ASTM D2240 | 52 |
| Flammability, 60 second ignition, vertical | -- | < 2 < 8 < 1 |
| Self-extinguish time, sec | | |
| Burn length, in | | |
| Drip self-extinguishing time, sec | | |

Storage

Uralane® 5779 A/B should be stored in a dry place, in the original sealed container at temperatures between 2°C and 40°C (35.6°F and 104°F). Tightly reseal containers after each use. Under these storage conditions, and when supplied under Huntsman standard certification, the product has a shelf-life of **6 months** from date of shipment (expiration date may differ based on customer specification). The product should not be exposed to direct sunlight.

Uralane® products are sensitive to humid environment. **DO NOT REFRIGERATE**. These are packaged under a blanket of dry nitrogen. After opening a container, re-blanket with dry nitrogen and then tightly reseal.

Precautionary Statement

Huntsman Advanced Materials Americas LLC maintains up-to-date Safety Data Sheets (SDS) 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 SDS as mentioned above.

KEEP OUT OF REACH OF CHILDREN

FOR PROFESSIONAL AND INDUSTRIAL USE ONLY

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