

**Formulated  
Systems Group**

**FURANE Aerospace Products**

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### URALANE® 5738-A/B

#### HIGH STRENGTH URETHANE ADHESIVE

- Bonds to Metals and Plastics
- No Crazeing of Polycarbonate
- High Peel Strength



#### DESCRIPTION

Uralane 5738-A/B is a two part, 100% solids urethane adhesive. It provides a wide spectrum bonding agent for many types of metals, plastics, glass, ceramics and composites. It cures to an extremely tough, high peel strength adhesive with good properties down to cryogenic temperatures.

#### TYPICAL PROPERTIES AS RECEIVED

| <u>Property</u>                      | <u>5738-A</u> | <u>5738-B</u> | <u>5738-A/B</u> | <u>Test Method</u> |
|--------------------------------------|---------------|---------------|-----------------|--------------------|
| Color                                | Amber         | Olive-brown   | Olive-brown     | Visual             |
| Specific gravity                     | 1.20          | 1.28          | 1.25            | ASTM-D-792         |
| Viscosity, centipose                 | 3-4,500       | Semi-paste    | Semi-paste      | ASTM-D-2393        |
| Flash point, COC, °F                 | 260           | >200          | ----            | ASTM-D-92          |
| Work life, 100 gms at 77°F, minutes  | ----          | ----          | 10-15           | ASTM-D-1338        |
| Shelf life at 77°F, unopened, months | 6             | 6             | ----            | FTM-204            |
| Solids, %                            | ----          | ----          | 100             | ASTM-D-1644        |

#### MIX RATIO

To 100 parts by weight of Uralane 5738-A, add 60 parts by weight of Uralane 5738-B. Mix both components thoroughly for 2-3 minutes to assure complete blending. Mix only that amount which can be in dispensed 10 minutes at 77°F. To extend work life spread mixed adhesive on a metal plate covered with polyethylene film immediately after mixing.

#### CURE SCHEDULE

7 days at room temperature, or gel at room temperature plus 2-4 hours at 150°F, or 1-2 hours at 200°F.

#### TYPICAL CURED PROPERTIES (Not for specification purposes)

| <u>Test</u>                        | <u>Result</u> |      |       | <u>Test Method</u> |
|------------------------------------|---------------|------|-------|--------------------|
| Maximum service temperature, °F    |               | 180  |       | ASTM-D-648         |
| *Tensile lap shear, psi            |               | 77°F | 180°F | ASTM-D-1002        |
| aluminum to aluminum               | -67°F         | 2450 | 1500  |                    |
| nylon to nylon                     |               | 520  | 780   |                    |
| ABS to ABS                         |               | 990  | 680   |                    |
| polycarbonate to polycarbonate     |               | 1100 | 720   |                    |
| *T-peel, aluminum to aluminum, psi |               | 60   | 75    | ASTM-D-1876        |
| polycarbonate to polycarbonate     |               | ---- | 25    |                    |
| Durometer hardness, A              |               | ---- | 88    | ASTM-D-2240        |
| Weight gain, 2 hour water boil, %  |               | ---- | 0.95  | ASTM-D-570         |

\*Cured with room temperature gel plus 2 hours at 200°F.

## PACKAGING & SHIPPING INFORMATION

Uralane 5738-A and Uralane 5738-B are nonrestricted articles.

## ENVIRONMENTAL INFORMATION

When used properly, this material is safe to handle and poses no environmental hazard. Spills should be contained with absorbent material and transferred to a closed container for disposal. Unreacted components should be handled carefully. Observe all precautionary statements that appear on the product label. Users should investigate all applicable waste regulations before disposal. For Professional and Industrial Use Only.

## CLEANLINESS AND SAFETY

### URALANE 5738-A

**WARNING!** CONTAINS ORGANIC ISOCYANATE. CAUSES SEVERE EYE AND SKIN IRRITATION AND POSSIBLE EYE BURNS. VAPOR OR MIST HARMFUL IF INHALED. MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTION. HARMFUL IF SWALLOWED. Do not get in eyes, on skin or clothing. Wear eye protection and impervious gloves when handling. Avoid breathing vapor or mist. Use with adequate ventilation. Keep container closed when not in use. Do not take internally.

**FIRST AID!** Eyes and Skin: Flush eyes with water for 15 minutes and get prompt medical attention. Wash skin thoroughly with soap and water. Remove and wash contaminated clothing before reuse. Get medical attention if irritation persists. Destroy contaminated articles made of leather. Inhalation: Remove subject to fresh air and get prompt medical attention. Swallowing: Dilute by giving water to drink and contact a physician promptly. Never give anything to drink to an unconscious person.

### URALANE 5738-B

**WARNING!** CAUSES EYE IRRITATION. CAUSES SKIN IRRITATION AND POSSIBLE ALLERGIC SKIN REACTION. HARMFUL IF INHALED. HARMFUL IF SWALLOWED. Avoid contact with eyes, skin, or clothing. Wear impervious gloves and splash goggles when handling. Wash thoroughly after handling. Avoid breathing vapor or mist. Keep container closed when not in use. Use only with adequate ventilation. Do not take internally.

**FIRST AID!** Eyes and Skin: Flush eyes with water for 15 minutes. Contact a physician if irritation persists. Wash skin thoroughly with soap and water. Remove and wash contaminated clothing before reuse. Inhalation: Remove subject to fresh air. Swallowing: Dilute by giving water to drink and contact a physician promptly. Never give anything to drink to an unconscious person.

## KEEP OUT OF THE REACH OF CHILDREN

Furane Aerospace Products, Ciba-Geigy 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.

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