

## 0316 Urethane Adhesive

## Thixotropic consistency keeps material from sagging once applied

0316 is an opaque amber, one-component, precision mixed, degassed, and frozen, electrically isolating, Space Flight Grade, precision mixed and frozen general purpose urethane adhesive. It features a very thixotropic consistency which keeps this material from sagging once applied. This material can be cured at either room or elevated temperatures. 0316 bonds well to most substrates such as metals, glass, ceramics, and plastics and meets NASA outgassing requirements with a TML of 0.61% and a CVCM of <0.01%.

| UNCURED                     |   |
|-----------------------------|---|
| Work Life @ 25°C            | 30 minutes  |
| Pot Life @ 25°C             | 15 minutes  |
| Viscosity @ 25°C            | Paste   |
| Shelf Life                  | 3 weeks @ -40°C 3 months @ -60°C<br>12 months @ -75°C             |
| CURE OPTIONS                | 8 hours @ 93°C 7 days @ 25°C<br>24 hours @ 23°C + 16 hours @ 65°C |
| CURED PROPERTIES            | Based on cure of 8 hours @ 93°C                                   |
| Color                       | Opaque Amber  |
| Shore A Hardness            | 70  |
| Glass Transition Temp (°C)  | -70   |
| Density (g/cc)              | 0.97  |
| ELECTRICAL<br>PROPERTIES    | Based on cure of 24 hours @ 23°C + 16 hours @ 65°C                |
| Volume Resistivity (ohm-cm) | 5.1E 14 @ 500 VDC   |
| THERMAL PROPERTIES          | Based on cure of 24 hours @ 23°C + 16 hours @ 65°C                |
| CTE above Tg (ppm/°C)       | 188   |
| CTE below Tg (ppm/°C)       | Not Determined  |
| Glass Transition Temp (°C)  | -76   |
| Operating Temp. Range (°C)  | -100 to 130   |
| OUTGASSING<br>PROPERTIES    | Based on cure of 24 hours @ 23°C + 16 hours @ 65°C                |
| TML (%)                     | 0.61  |
| CVCM (%)                    | <0.01   |
| WVR (%)                     | 0.06  |
| OUTGASSING<br>PROPERTIES    | Based on cure of 7 days @ 25°C                                    |
| TML (%)                     | 0.74  |
| CVCM (%)                    | <0.01   |
| WVR (%)                     | 0.08  |
| ACOUSTIC<br>PROPERTIES      |   |
| Velocity (m/s)              | 1,622   |
| Impedance (MRayls)          | 1.578   |

| KE'  | Y FEATURES                       |
|------|----------------------------------|
| Bor  | nds Well to Most Substrates      |
| Elec | ctrically Isolating              |
| Ver  | y Thixotropic                    |
| Roc  | om or Elevated Temperature Cure  |
| Spa  | ce Flight Grade                  |
| Use  | r-friendly Packaging             |
| Me   | ets NASA Outgassing Requirements |
| √R   | oHS Compliant                    |
|      |                                  |

## Chat with a specialist:

service@appli-tec.com 603-685-0500 ext. 526 www.appli-tec.com

7 Industrial Way, Unit 1, Salem, NH 03079

The data contained herein is provided for informational purposes only and are believed to be reliable. APPLI-TEC does not guarantee suitability of this product for any resultant application or freedom from patent infringement. Furthermore, APPLI-TEC disclaims any liability for incidental and consequential damages of any kind including but not limited to lost profits.

Rev H 6/26/2024

| Loss (dB/cm-MHz) | -6.7 |  |
|------------------|------|--|
| Density (g/cc)   | 0.97 |  |