

# TITAN<sup>®</sup> 660

## High Modulus Urethane Adhesive



### Product Data Sheet

#### Description

**TITAN<sup>®</sup> 660** is a one-part, high viscosity, fast curing polyurethane formulated for autoglass installations. Performance characteristics exceed criteria established by the automotive industry and those covered by FMVSS 212.

Features	Benefits
<b>Isocyanate Free</b>	Enhanced environmental and personal safety
<b>Primerless to Glass</b>	Reduced installation times, reduced costs, increased safety margin and reduced waste
<b>Medium Decking</b>	Supports glass without dams or blocks
<b>Excellent Cut-Off</b>	Easy to clean up - no mess

US Patent 4,889,903

#### Packaging

CT-1300 - 12 EA 10.1 fl oz (300 ml) aluminum cartridges per case

SG-1300 - 12 EA 20 fl oz (600 ml) foil sausage packs per case

SG-1300-10 - 12 EA 10.1 fl oz (300 ml) foil sausage packs per case

Technical Data	
Base Polymer	Isocyanate Free Polyurethane
Color	Black
Tack Free Time	Approximately 10 minutes at 70°F (23°C) / 50% RH
Type of Curing	Moisture
Shore A Hardness	50-55
VOC Content	108 g/l (0.90 LB/Gallon)
Tensile Strength	>1000 psi
Lap Shear Strength	>200 psi
Values are typical performance properties and characteristics based on laboratory testing. This is intended as a guide for comparison purposes and does not constitute a specification or specification range.	

#### Application Properties

Application Temperature:	0° to 113° F (-17° - 45°C)
Storage Temperature:	40° to 90° F (5° - 33°C)
Shelf Life:	9 months in unopened container when stored at 77° F / 50% RH

#### TITAN<sup>®</sup> 660 Safe Drive Away Chart

Minimum installation humidity: 10%

RH	20%	50%	75%	90%
>85°F	3 hr	3 hr	3 hr	3 hr
70° F	3 hr	3 hr	3 hr	3 hr
55° F	4 hr	3 hr	3 hr	3 hr
40° F	5 hr	5 hr	5 hr	5 hr

For best results, ADCO recommends that **TITAN<sup>®</sup> 660** Urethane Adhesive be used at temperatures of 40°F and above.

#### Application Instructions

1. If there is inclement weather (snow, ice, rain, mist, fog etc.), perform glass installations in a controlled environment to assure proper adhesion.
2. Remove all exterior moldings, trim, and windshield following the vehicle manufacturer's instructions.
3. Using the full cut method, inspect the old urethane to insure a firm bond exists to the pinchweld. Firmly bonded urethane should be trimmed, leaving a level bed around the entire pinchweld approximately 1/16" to 1/8" thick.
4. If old urethane demonstrates any signs of peeling, or if butyl tape, silicone, or rust is apparent, remove all material down to the pinchweld.
5. Prime pinchweld scratch marks and repaired rust areas with **TITAN<sup>®</sup> UP100** Universal Primer. Allow 10-15 minutes to dry. (See **TITAN<sup>®</sup> UP100** product data sheet for complete instructions.)
6. Clean replacement windshield thoroughly with **TITAN<sup>®</sup> 604** Glass Cleaner.

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### Application Instructions (continued)

**Caution:** Some glass frits are conditioned with a variety of chemicals. ADCO recommends that installers be aware that some frits may require additional preparation to insure a safe installation. If contamination is still present after the initial cleaning with TITAN<sup>®</sup> 604 Glass Cleaner, ADCO recommends wet scrubbing the bonding area with a light or medium grade abrasive pad and re-clean with 604 as needed to insure no contamination exists. This process is recommended for both Primerless and Primed applications.

7. Wipe moldings and encapsulated parts with TITAN<sup>®</sup> 604 Glass Cleaner. Encapsulated parts should be primed with TITAN<sup>®</sup> UP100 Universal Primer. Use a fresh applicator each time the primer is applied.
8. Where required, select and install appropriate dam tape and blocking materials.
9. Apply a 1/2" to 5/8" high bead of TITAN<sup>®</sup> 660 Urethane Adhesive around the entire perimeter of the pinchweld. Apply directly on top of the freshly trimmed existing bed of urethane.
10. Install clean glass into opening, using light hand pressure to assure complete contact with wet TITAN<sup>®</sup> adhesive. Replace moldings and accessories.

**Warning:** Condensation can form on application surfaces. If condensation cannot be fully removed, complete the installation in a controlled environment at temperature and humidity levels indicated on the "Safe Drive Away Chart".

### Health & Safety

For all TITAN<sup>®</sup> products, and for other products used in conjunction with TITAN<sup>®</sup> products, users must follow individual product data sheet and Material Safety Data Sheets (MSDS) for health and safety precautions. Always use protective eyewear. Inform your customer that the **USE OF SEAT BELTS IS ALWAYS RECOMMENDED.**

### Clean-Up

Wipe off excess TITAN<sup>®</sup> 660 with a solvent or citrus based cleaner. For cleaning hands, use pumice hand cleaner.

### Caution

All statements and technical information in this document are based on tests or data that ADCO believes is reliable. However, ADCO does not warrant or guarantee the accuracy or completeness of this information. The suitability of this product for each intended use must be determined by the purchaser or user who has sole knowledge and control of factors that can affect product performance and assumes all risk and liability arising out of such use.

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