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## U-418

### Products

#### Urethane Adhesives

[Speedlink U-202EP](#)[BETASEAL U-216](#)[BETASEAL 3000HMNC](#)[BETASEAL 1500HV](#)[U-400HV](#)[U-410HV](#)[U-418](#)

#### Urethane Primers

[FlexiTrim™](#)[Cleaners](#)[Tools](#)[Tapes](#)

U-418 adhesive eliminates steps and speeds installations by incorporating glass primer into the urethane. It requires a pinchweld primer only if the metal is scratched during glass removal.

### U-418

Quick Cure Primerless to Auto Glass  
Urethane Adhesive  
10.5 oz (310 ml) cartridge

- Meets all OEM standards
- Fast installations — no windshield prep or glass primer needed
- Tack-free in 30 minutes
- Fast cure performance, ask for an updated [Safe Drive Away Chart](#)
- Passes all OEM strength and durability requirements
- Manufactured to the same standards by an approved OEM supplier — Essex
- Available in regular or high viscosity formulations
- Prime the pinchweld with [U-413](#)



EAL, BETAPRIME,  
rademarks of The

# Essex ARG U-418 Technical Data

**RUDOLPH BROS. & CO.**

P.O. BOX 425  
CANAL WINCHESTER, OH 43110  
(614) 833-0707  
FAX: 1-800-600-9508



## Essex U-418 Quick Cure Primerless to Auto Glass Urethane Adhesive

- Black, one-component, polyurethane auto glass adhesive

- Meets or exceeds ALL one-component original equipment specifications
- Extremely weather resistant and durable
- Fast cure, primerless windshield adhesive
- Excellent product workability and sag resistance
- Reduces application time and permits a convenient drive away period (with or without dam tape)

### Application Technique

- Thoroughly clean windshield with a suitable alcohol-free glass cleaner. Make sure glass and frit are free of all contaminants and are completely dry, before using U-418
- Pinchweld should be cleared of dirt and grime
- Apply with a standard caulking, pneumatic, or battery gun
- U-418 has excellent adhesion to freshly cut cured OEM urethane adhesive
- Essex U-413 Urethane Pinchweld Primer should be used on any bare or scratched spots before applying adhesive

### Typical Applications

- Structurally bonded or direct glazed automotive glass such as windshields, backlites, quarter glass, and other stationary glass
- Other uses such as channel bonding, attaching hardware to glass, and backfilling to install reveal moldings or other trim

### Application Details

- See vehicle manufacturer's recommendations for additional details. Refer to the Essex ARG Glass Bonding Technical Guide for complete installation procedures. Do not use any other manufacturers' primers, cleaners, or other chemicals in conjunction with any Essex adhesive system.
- Best if used at 72°F (22°C)

### Physical Properties

Appearance: Black, smooth paste  
Solids Content, Minimum: 94%  
Flash Point, Setflash: >110°F (43°C)  
Weight Per Volume: 10.1 lbs/gal (1.21 kg/l)  
Specific Gravity: 1.20  
Sag: None  
Odor: Minimal  
Tack Free: 25 minutes after application at 72°F (22°C) and 50% RH  
Working Time: 15 minutes at 72°F (22°C) and 50% RH  
Full Cure: Less than 24 hours at 72°F (22°C) and 50% RH

### Cured Physical Properties

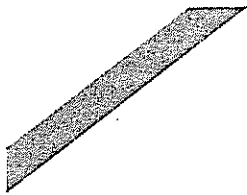
Shore A Hardness:  
After full cure and 7 days at room temperature: 55-60  
Tear Strength: 350 N/cm minimum  
Elongation: >400%  
Tensile Strength: >700 psi

### Adhesive System Performance

#### Adhesive Durability:

1. Initial for 72 hours at 72°F (22°C) and 50% RH
  2. Two Week Heat Age
  3. Water Immersion
  4. Humidity Age
  5. Weather-O-Meter
  6. Cycle Testing
  7. Two year Florida Exposure
  8. Two year Arizona Exposure
  9. Two year Michigan Exposure
- (Note GM, Ford and Transnationals do not require this test)

	General Motors	Ford	Daimler Chrysler	Transnationals
Vibration:	PASSED	PASSED	PASSED	PASSED
Cold Impact:	PASSED	PASSED	PASSED	PASSED
Fogging Resistance:	PASSED	PASSED	PASSED	PASSED



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#### Clean Up

- If required, use Essex Urethane Adhesive Cleaner following all directions and precautions
- Test Essex Urethane Adhesive Cleaner on an inconspicuous place prior to using
- Essex Urethane Adhesive Cleaner is not recommended for painted hard plastic surfaces
- Dispose of empty containers properly

#### Safety Precaution

- Keep away from heat, sparks, or open flame
- Use only with adequate ventilation
- Avoid breathing vapors
- If swallowed, call physician immediately
- For eye contact, flush with water for 15 minutes and get medical attention
- Wear appropriate safety equipment such as gloves and eye protection, or as specified by your company
- Avoid skin contact; flush with water if necessary
- Refer to Material Safety Data Sheet (MSDS) for additional information

#### Shelf Life

- Store at temperatures between 60°F (15°C) and 80°F (27°C).
- All materials manufactured by or for Essex have a shelf life. Urethane adhesives and primers are marked with expiration dates. Unopened product is considered within shelf life up to and including the date marked on the product. Product is considered expired past the date marked and should not be used.

#### Packaging

- Sealed in 10 5 ounce aluminum cartridges
- 10 cartridges per carton
- 5 cartons per case (50 cartridges)

#### System Compatibility

- Use no other manufacturers' primers, cleaners, or other chemicals in conjunction with any Essex adhesive system

#### Disclaimer of Warranty

Product manufactured by Essex ARG has a stated shelf life. Expiration dates are marked on all urethane adhesives and primers. Product is considered within shelf life up to and including the date marked on the product. Product is considered expired past the date marked and should not be used. It is also unacceptable for return or credit. Essex ARG's only obligation shall be to replace such quantity of the product proven to be defective. Essex ARG shall not

be liable for any loss or damage direct or consequential, arising out of the sale of, or the inability to use, the product. Before using, user shall determine the suitability whatsoever in connection therewith. EXCEPT AS EXPRESSLY PROVIDED HEREIN, THERE ARE NO OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

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