Technical Data Sheet

H.B. Fuller | Engineering Adhesives

TS880

TS880 Acrylic-based Structural Adhesive is a two-part adhesive (10:1 ratio by volume), which can bond many low surface energy plastics without special surface preparation, including many grades of polypropylene, polyethylene, TPO, etc. TS880 can replace screws, rivets, plastic welding, and two-step processes which include chemical etchants, priming or surface treatments in many applications. Typical applications include bonding plastics, metals, glass and rubbers.

Technology / Base	Modified Acrylic
Type of Product	Structural Adhesive
Components	Two component
Curing	Room Temperature Cure
Appearance / Color	Off White
Consistency	Viscous Liquid

Features and Benefits

- Low surface energy substrate bonding modified acrylate adhesive
- Room temperature cure
- Ability to bond PE/PP/LDPE/HDPE/TPO
- No pre-treatment of the substrates needed
- Excellent water and humidity resistance
- Solvent-free of adhesive system

Technical Data

Rheology		**Condition/Method**
Viscosity - Resin	40,000 to 60,000 cPs @ 25°C	Brookfield DV-II #7, 2 rpm
Viscosity - Activator	250,000 to 500,000 cPs @ 25°C	Brookfield DV-II #7, 2 rpm
Viscosity - Mixed		
Density		
Mixed Density	1.00 g/cc	GB/T 13477.2
Mix Ratio		
Volume Mix Ratio	10:1	
Weight Mix Ratio		
Uncured Material Characteristics		
Open Time	2 - 3 minutes	
Fixture Time		
Cure Temperature and Time	Room Temperature, 24 hr	
Cured Mechanical Properties		
Over Lap Shear Strength		
Carbon Steel	7.2 MPa (AF)	GB/T 7124*
Aluminum	7.3 MPa (AF)	GB/T 7124*
Stainless Steel		
Galvanized Steel		
ABS	4.9 MPa (SF)	GB/T 7124*
FRP	5.2 MPa (CF)	GB/T 7124*
Polycarbonate	3.2 MPa (CF)	GB/T 7124*
HDPE	5.7 MPa (SF)	GB/T 7124*
Polypropylene	6.0 MPa (SF)	GB/T 7124*

* NOTE

CF = Cohesive Failure
AF = Adhesive Failure
MM = Mixed (Mode of AF and CF)
SF = Substrate Failure/Break/Yield

Technical Data Sheet

H.B. Fuller | Engineering Adhesives

General Instructions

- For best performance bond surfaces should be clean, free of grease and all other surface contaminants.
- It is recommended that either meter mix equipment or cartridges with static mix nozzles be used to ensure the proper 10:1 mix ratio and dispense the adhesive. Hand mixing is not recommended and may result in unpredictable results.
- Lower temperature will diminish the reactivity of the product, and higher temperature will speed up curing process. The recommended temperature of the working circumstance is 15～30°C.
- To assure maximum bond strength, surfaces must be mated within the adhesive's open time. Use enough material to completely fill the joint when parts are clamped.
- Do not return unused material to container as it would result in contamination and/or premature hardening of contents.

Handling and Clean-Up

Clean up is best before the adhesive has cured. Cleaners containing NMP (N-methyl pyrolidone) or Citrus terpene provide the best results. On cured adhesive repeat use may be required.

Storage and Shelf Life

For maximum shelf life, TS880 Acrylic-based Structural Adhesive should be stored in a cool, dry area at below 4°C. When stored at the recommended temperatures in the original unopened containers, this product has a shelf life of six months from date of shipment.

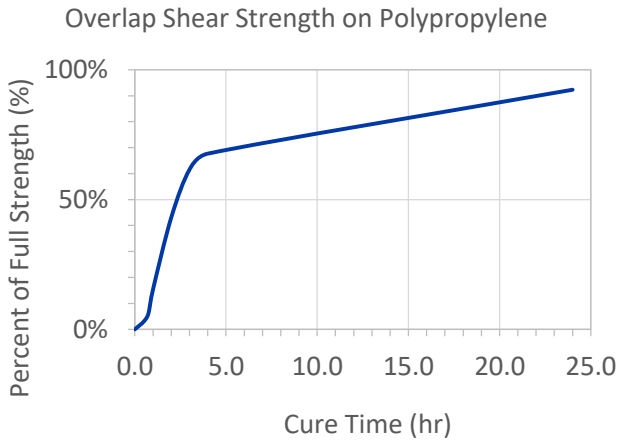
Typical Packaging

Please contact your local Sales Office for available packaging options.

Safety and Disposal

For safe handling information on this product, consult the Safety Data Sheet (SDS)

Time Until Full Cure (% of RT strength)



H.B. Fuller Company, Beijing
Tonsan Adhesive Co., LTD.
5 Shuangyuan Rd.
Badachu High-Tech Zone
100041, Beijing, China

Date Modified: 01 December 2018

Connecting what matters.™

www.hbfuller.com www.hbfullerengineering.com