# **Technical Data Sheet**





## **TS820**

Low-Odor Structural Adhesive TS820 is a two-part, 1:1 mix ratio, toughened adhesive with less odor than most acrylic adhesives. TS820 Adhesive has excellent shear and peel strength along with good impact resistance and durability. TS820 Adhesive quickly bonds most metals and ceramics with minimal surface preparation.

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

### **Features and Benefits**

- Low odor Acrylic Adhesive
- Strong and durable adhesion
- Minimal surface preparation
- 1:1 mix ratio
- Excellent shear and peel strength
- High bond strength to stainless steel and galvanized steel

Technical Data			
Rheology		Condition/Method	
Viscosity - Resin	240,000 to 290,000 cPs @ 25°C	Brookfield RV7 20 rpm	
Viscosity - Activator	120,000 to 160,000 cPs @ 25°C	Brookfield RV7 20 rpm	
Viscosity - Mixed		'	
Density			
Mixed Density	1.05 g/cc	GB/T 13477.2	
Mix Ratio			
Volume Mix Ratio	1:1		
Weight Mix Ratio	1:1		
<b>Uncured Material Characteristics</b>			
Open Time	10 minutes		
Fixture Time	15 minutes		
Cure Temperature and Time	Room Temperature, 24 hr		
<b>Cured Mechanical Properties</b>			
Over Lap Shear Strength			
Carbon Steel	25.8 MPa (CF)	GB/T 7124*	
Aluminum	23.5 MPa (CF)	GB/T 7124*	
Stainless Steel	24.5 MPa (CF)	GB/T 7124*	
Galvanized Steel	23.8 MPa (CF)	GB/T 7124*	
ABS	, ,		
FRP			
Polycarbonate			
HDPE			
Polypropylene			

\* NOTE

CF = Cohesive Failure

AF = Adhesive Failure

MM = Mixed (Mode of AF and CF)

SF = Substrate Failuer/Break/Yield

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#### **General Instructions**

- For best performance bond surfaces should be clean and free of grease. Extensive surface preparation is not required.
- Mixing part A and part B in the correct ratio and mix thoroughly. Once mixed, it should achieve a uniform color. It is recommended that either meter mix equipment or cartridges with static mix nozzles be used to properly ratio and dispense the adhesive.
- 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.

## 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)

### **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

TS820 Low odor Structural Adhesive should be stored in unopened containers in a cool, dry area at a temperature between 8°C and 25°C with the shelf life of nine month.

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