



*The Glue People*

**Trade Grade Products Ltd**  
Unit 2, Thorne Way  
Woolsbridge Industrial Park  
Three Legged Cross  
Wimborne, Dorset, BH21 6FB

Tel 01202 820177  
Fax 01202 814011

# Tradeweld Acrylic FS/SS

## Modified methacrylate structural adhesive

### General Description

Tradeweld Acrylic FS/SS is a two part 'A&B' component system, which is fast setting when mixed via a static mix nozzle at room temperatures. Because it is a high viscosity non-sagging material, the mixed material is ideal for all types of gap filling requirements on steel, aluminium, polycarbonates and general plastics. It is also very good on vertical surface bonds, exhibiting excellent structural strength even without priming the surfaces. Because of its macro structure the bonds show excellent durability, high peel strength (even in big gaps) and excellent solvent and environmental resistance.

### Typical uses of Tradeweld Acrylic FS/SS

Structural joining of metals, plastics, composite bonding and on ceramics where a high impact strength is required. Applications include wind turbine, vehicle roofs, fibreglass, sports goods, automotive spoilers, venting/ducting and housing.

### Application

For best results use on clean, dry substrates between +10°C to +30°C. Insert the cartridge into the slot on the applicator gun. Once the cartridge is secure, remove the cartridge cap and level the pistons by dispensing a small amount of material, before attaching the mixing nozzle. Attach the mixing nozzle and dispense adhesive until a uniform colour is evident. Apply the mixed adhesive to one joint surface, immediately bring the two surfaces into contact and apply a steady pressure. The cartridge can be re-sealed if only partly used by removing the mixing nozzle, cleaning the two cartridge openings and replacing the cartridge cap.

### Physical Data

#### Typical uncured properties.

	<b>Adhesive component</b>	<b>Activator component</b>
<b>Adhesive</b>	Methylmethacrylate	Methylmethacrylate
<b>Appearance</b>	Off white gel	Amber like gel
<b>Specific Gravity @ 25°C</b>	1.0	0.97
<b>Viscosity @ 25°C</b> Brookfield DVII, Spindle 7, 2.5rpm	200,000 cps	200,000 cps
<b>Flash Point (TCC)</b>	> 10°C	> 10°C
<b>Operating Temperature</b>	-40°C to +180°C	

**Mixed properties.**

	<b>FS</b>	<b>SS</b>
<b>Appearance</b>		Pale yellow paste
<b>Working Time</b>	5 minutes	20 minutes
<b>Fixture Time</b>	12 – 15 minutes	30 – 50 minutes
<b>Mix Ratio</b>	1:1	1:1

**Typical cured properties.****Tradeweld Acrylic FS / SS**

<b>Tensile Strength</b>	Average 3500 psi
<b>Hardness</b>	75 Shore D (Approx.)
<b>Average Shrinkage</b>	< 5%

**ASTM D1002 Lapshears**

<b>On steel / steel</b>	4150 psi
<b>On aluminium as received</b>	3500 psi
<b>On polycarbonates</b>	2500 psi
<b>On nylon</b>	200 psi
<b>Impact Strength</b>	> 20 KJ/M <sup>2</sup>

**Solvent and Environmental Resistance.**

Formulated to meet ASTM D1002 on steel lapshears with a 5mm gap size cured for 1 week @ 23°C.

	<b>Temperature</b>	<b>1000 Hours</b>	<b>2000 Hours</b>
<b>RH 100%</b>	40°C	60%	35%
<b>Salt Spray</b>	50°C	75%	60%
<b>Water Glycol</b>	20°C	75%	65%
<b>Motor Oil</b>	40°C	75%	93%
<b>Gasoline</b>	40°C	95%	92%
<b>IPA</b>	40°C	75%	90%

**General**

**Storage** - Products shall be ideally stored in a cool, dry location in unopened containers at a temperature between 8° to 28°C (46° to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. For specific shelf-life information, contact Trade Grade Products at the above address.

**Important Notice** - Data contained in this document is for information only and is believed to be reliable. Trade Grade Products Ltd (TGP) cannot assume responsibility for results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability of the product for any specific purpose and TGP is pleased to provide a sample upon request.

Before using this product ensure that you have been supplied with and have read carefully the following information.

- The hazard label (complying with latest CDG/CPL regulations) applied to the container.
- Material Safety Data Sheet, Tradeweld Acrylic FS / SS.