TECHNICAL DATA SHEET My-T-Glue<sup>®</sup> 793 General Purpose January 2020

### **Product Description**

My-T-Glue<sup>®</sup> 793 is one component general purpose cyanoacrylate adhesive. It is suitable for bonding of Metal, Plastics, Rubbers substrate and Plywood and Wood substrate.

## **Properties**

Technology		Cyanoacrylate
Chemical Type	:	Ethyl Cyanoacrylate
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Component	:	One component
Appearance	:	Transparent to Straw
		coloured liquid
Sp. Gravity @ 25 °C	:	1.06±0.03
Viscosity @ 25±2 °C,		
Brookfield, Spindle # 3,	:	1500-2000 cP
Speed 20 r.p.m.		
ASTM D1084		
Secondary cure	:	Activator
Service temperature	:	-50 °C to 120 °C
Key Substrate	:	Metals, Plastics and
		Rubbers etc.
Application	:	Bonding

# **Curing Performance**

Under normal conditions, the atmospheric moisture initiates the curing process. Although full functional strength is developed in a relatively short time, curing continues for at least 24 hours before full chemical/solvent resistance is developed.

# Cure Speed vs. Substrate

The rate of cure will depend on the substrate used. The fixture time achieved on different materials at  $25^{\circ}$ C / 60 % relative humidity is shown below. This is defined as the time to develop shear strength of 0.1 N/mm<sup>2</sup>

### Fixture Time, Seconds

:	40 to50
:	30 to 80
:	<10
:	<10
:	15 to 30
:	10 to 30
:	5 to10
	:



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### Cure Speed vs. Bond Gap

The rate of cure will depend on the bond-line gap. Thin bond lines result in high cure speeds, increasing the bond gap will decrease the rate of cure.

# Cure Speed vs. Activator

Where cure speed is unacceptably long due to large gaps, applying activator to the surface will improve cure speed. However, this can reduce ultimate strength of the bond and therefore testing is recommended to confirm effect.

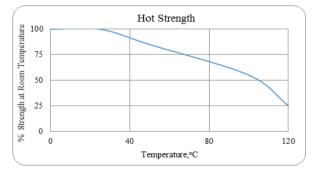
# **Adhesive Properties of Cured Material**

After 24 hours @ 25:	±2 °	C		
Lap Shear Strength	, A.	STM D 1002		
Steel	:	20 to 35 N/mm <sup>2</sup>		
Aluminum	:	10 to 20 N/mm <sup>2</sup>		
ABS	:	5 to 13 N/mm <sup>2</sup>		
PP	:	4 to 6 N/mm <sup>2</sup>		
PVC	:	4 to 6 N/mm <sup>2</sup>		
Polycarbonate	:	4 to 6 N/mm <sup>2</sup>		
Phenolic	:	7 to 13 N/mm <sup>2</sup>		
Neoprene	:	5 to 15 N/mm <sup>2</sup>		
Nitrile	:	5 to 15 N/mm <sup>2</sup>		
After 24 hours @ 25±2 °C				
Tensile Strength, ASTM D 897				
Steel	:	20 to 30 N/mm <sup>2</sup>		

#### **Hot Strength**

Test : Lap Shear Strength, ASTM D 1002 Substrate : Steel Cure : 24 hrs @ 25±2 °C

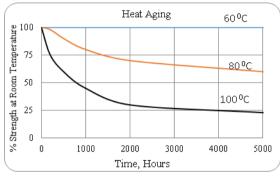
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# **Heat Aging**

Test	:	Lap Shear Strength, ASTM D 1002
Substrate	:	Steel
Cure	:	24 hrs @ 25±2 °C

Aged at temperature indicated and tested @  $25\pm2$  °C.



#### **Chemical/Solvent Resistance**

Test	:	Lap Shear Strength, ASTM D 1002
Substrate	:	Steel
Cure	:	24 hrs @ 25±2 °C

Aged under condition indicated and tested @ 25 $\pm$ 2 °C.

Environment	Тетр	% of Initial Strength		
Environment	( <sup>0</sup> C)	100	500	1000
		hrs	hrs	hrs
Engine oil	100	100	100	100
Water Glycol	40	100	100	100
50/50				
Ethanol	25	100	100	100
Isopropanol	25	100	95	95
1,1,1-	40	95	95	95
Trichloroethane				

## **Directions for Use**

- 1. For best performance the bond surfaces should be clean and free from grease.
- 2. This product performs best in thin bond gaps.
- 3. Adhesive can be applied using dispensing tips supplied. Once the adhesive is dispensed, the bonded parts should be held in contact until the part has developed handling strength.
- 4. Excess adhesive can be dissolved with cleanup solvents, nitro methane or acetone

# Handling

For safe handling My-T-Glue<sup>®</sup> 793 must be handled in a manner as indicated in Material Safety Data Sheet (MSDS) and in compliance with relevant local regulations.

- My-T-Glue<sup>®</sup> 793 is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials
- ✤ My-T-Glue<sup>®</sup> 793 is non-volatile and nonflammable at room temperature.

# Storage

- Store Product My-T-Glue<sup>®</sup> 793 in a cool, dry location in unopened containers at a temperature between 10°C to 20°C unless otherwise labeled. Optimal storage is at the lower half of this temperature range.
- Store away from sunlight and heat sources.
- My-T-Glue<sup>®</sup> 793 will exhibit a shelf life of six months when stored in above mentioned conditions.
- To prevent contamination of unused product, do not return any material to its original container. For further specific shelf life information, contact our technical service center R&D Center.

#### Pack Size

My-T-Glue<sup>®</sup> 793 is ideally available in 20 gm and 50 gm pack size.

#### Note

A11 statements, technical information and recommendations set forth herein are based on tests which Metlok Private Limited, believes to be reliable. However, Metlok Private Limited does not guarantee their accuracy or completeness. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In no case will Metlok Private Limited be liable for direct, consequential economic or other damages. 

### METLOK PRIVATE LIMITED

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