TECHNICAL DATA SHEET My-T-Glue® 780 January 2019



METLOK PRIVATE LIMITED (An ISO 9001 Certified Company) W-27, M.I.D.C. Industrial Area Kalmeshwar – 441 501, Nagpur

Product Description

My-T-Glue[®] 780 is a rubber-toughened cyanoacrylate adhesive particularly suited for bonding of rubber, plastics and metal substrates.

Special features:

- Good toughness.
- Increased flexibility.

Properties of Material

Technology : Cyanoacrylate
Component : One component
Appearance : Black-Violet
Viscous Liquid

Sp. Gravity @ 25 °C : 1.06 Viscosity, @ 25±2 °C : 100-200 cP

Brookfield Spindle 2,

Speed 100 r.p.m.

Secondary cure : Activator
Service temperature : -50 °C to 100 °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° C / 60 % relative humidity is shown below. This is defined as the time to develop shear strength of 0.1 N/mm^2 .

Fixture Time, Seconds

Mild Steel (degreased) 30 to 50 Aluminium 30 to 50 Neoprene : <10 Rubber, Nitrile : <10 PP-PP 15 to 25 **ABS** 10 to 30 : **PVC** 20 to 50

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, ASTM D 1002

Steel : 15 to 30 N/mm²
Aluminum : 11 to 20 N/mm²
ABS : 4 to 6 N/mm²

PP : 4 to 6 N/mm²
PVC : 4 to 6 N/mm²
Polycarbonate : 4 to 6 N/mm²
Phenolic : 7 to 13 N/mm²
Neoprene : 5 to 15 N/mm²
Nitrile : 5 to 15 N/mm²

After 24 hours @ 25±2 °C

Tensile Strength, ASTM D 897

Steel : 15 to 25 N/mm²

Hot Strength

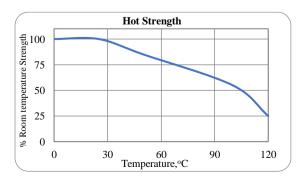
Test : Lap Shear Strength, ASTM D

1002

Substrate: Steel

Cure : 24 hrs @ 25±2 °C

Tested at temperature indicated.



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Heat Aging

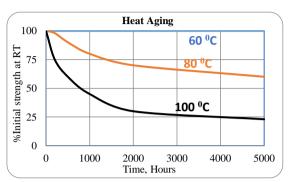
Test: Lap Shear Strength, ASTM D

1002

Substrate: Steel

Cure : 24 hrs @ 25±2 °C

Aged at temperature indicated and tested @ 25 ± 2 °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 ± 2 °C.

| Environment | Temp | % of Initial Strength | |
|-------------|-----------|-----------------------|----------|
| | (^{0}C) | 100 hrs. | 500 hrs. |
| Engine oil | 100 | 100 | 95 |
| Gear oil | 100 | 80 | 50 |

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.
- 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® 780 must be handled in a manner as indicated in Material Safety Data Sheet (MSDS) and in compliance with relevant local regulations.
- My-T-Glue® 780 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® 780 is non-volatile and nonflammable at room temperature.

Storage

- ❖ Store Product My-T-Glue® 780 in a cool, dry location in unopened containers at a temperature between 20°C to 25°C.
- Store away from sunlight and heat sources.
- My-T-Glue® 780 will exhibit a shelf life of six months when store 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[®] 780 is ideally available in 20 gm and 50 gm.

Note

statements. technical information 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.

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