TECHNICAL DATA SHEET
My-T-Lok® 462
High Strength
June 2021

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

Product Description

My-T-Lok 462 is designed for sealing core plugs but is also applicable to many other high strength sealing applications where non-migration is desired.

Special Features:

- High strength anaerobic retaining adhesive compound.
- The thixotropic nature reduces the migration of liquid product after application to the substrate.

Applications:

- Sealing and securing cylindrical metal assemblies, e.g. engine block cup and core plugs, water pump seals, and hub and shaft assemblies.

Properties

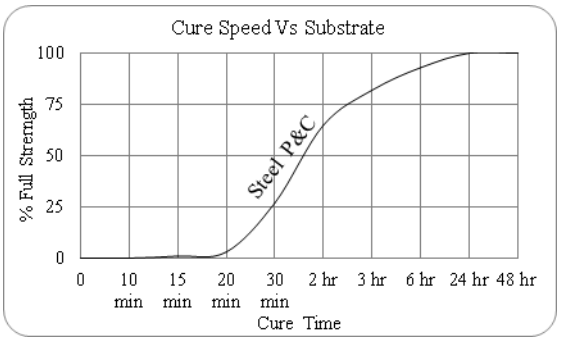
Technology	:	Acrylic
Chemical Type	:	Methacrylate
Component	:	One component
Appearance	:	Red liquid
Specific Gravity @ 25 °C	:	1.05
Viscosity @ 25±2 °C, Brookfield DV II +Pro, Spindle #3 Speed 20 rpm.	:	2000-3000 cP
Spindle #3 Speed 2.5 rpm.	:	4000-13500 cP
Cure	:	Anaerobic
Secondary Cure	:	Activator
Strength	:	High
Application	:	Retaining

Curing Performance

My-T-Lok® 462 cures when confined in the absence of air between closed fitting metal surfaces. Although functional strength is developed in a relatively short time, curing continues for at least 24 hours before full chemical/solvent resistance is developed.

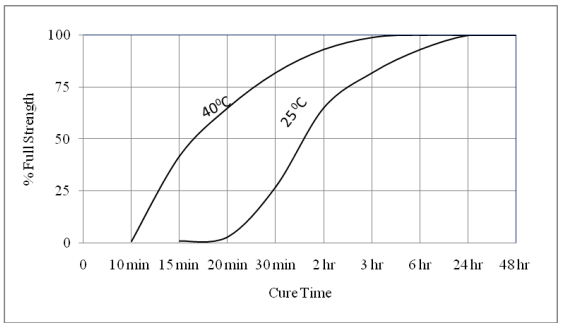
Cure Speed vs. Substrate

The rate of cure will depend on the substrate used. The graph shows the shear strength developed with time on steel pins and collars and tested according BIS 13055:1991.



Cure Speed vs. Temperature

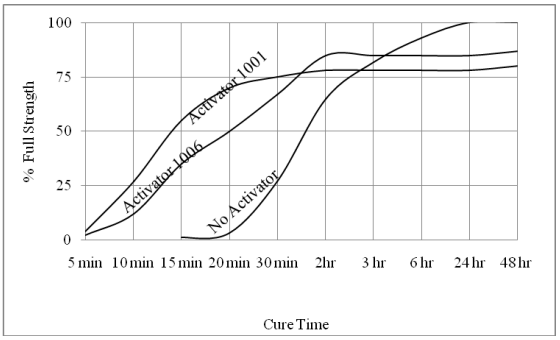
The rate of cure will depend on the ambient temperature. The graph shows the shear strength developed with time at different temperatures on steel pins and collars and tested according to BIS 13055:1991.



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 trim down ultimate strength of the bond and therefore testing is recommended to confirm effect.

The graph shows shear strength developed with time using Activator® 1001 and Activator®1006 on steel pins and collars and tested according to BIS 13055:1991.



Adhesive Properties of Cured Material

Compressive Shear Strength, BIS 13055:1991; After 1hr @ 25±2 °C
Steel Pins and Collars : ≥ 6 N/mm^2
Compressive Shear Strength, BIS 13055:1991; After 24 hrs @ 25±2 °C
Steel Pins and Collars : 13-20 N/mm^2

Compressive Shear Strength, BIS 13055:1991; Cure for 24 hrs @ 25±2 °C Tested at 88 °C
Steel Pins and Collars : 13-15 N/mm^2

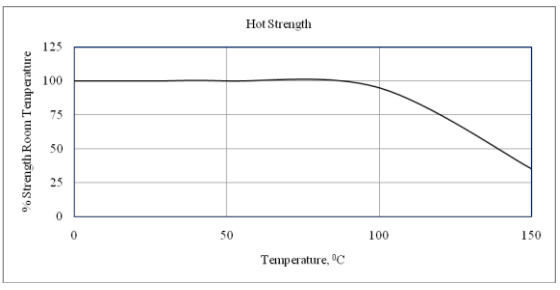
Compressive Shear Strength, BIS 13055:1991; Heat aged for 120 hrs @ 121°C, Tested @ 25±2 °C
Steel Pins and Collars : 13-15 N/mm^2

Torque, BIS 13055:1991After 24 hrs @ 25±2 °C
Breakaway Torque, : 25-40 N.m
M10 Phosphated Steel N&B
Prevail Torque, : 15-25 N.m
M10 Phosphated Steel N&B

Hot Strength

Test : Shear Strength, BIS 13055:1991
Substrate : Steel Pins and Collars
Cure : 24 hrs @ 25±2 ºC

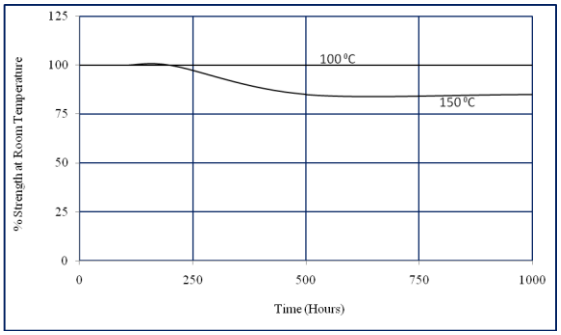
Tested at temperature indicated



Heat Aging

Test : Shear Strength, BIS 13055:1991
Substrate : Steel Pins and Collars
Cure : 24 hrs @ 25±2 ºC

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



Chemical/Solvent Resistance

Test : Shear Strength, BIS 13055:1991
Substrate : Steel Pins and Collars
Cure : 24 hrs @ 25±2 ºC
Aged under condition indicated and tested @ 25±2 ºC.

Environment	Temp (ºC)	% of initial Strength		
		100 Hrs.	500 Hrs.	1000 Hrs.
Engine oil	120	100	100	90
Gear oil	120	100	100	100
Petrol	25	100	100	95
Diesel	25	100	100	95

Directions for Use

1. For best performance bond surfaces should be clean and free from grease.
2. If the material is an inactive metal or the cure speed is to slow, apply Activator® 1001 and Activator®1006 on all threads and allowed to dry.
3. Ensure joints are completely filled with adhesive.
4. For slip fitted assemblies apply adhesive around the pins and threading edge of the collars.
5. For press fitted assemblies, the adhesive should be coated onto the pin.
6. The collar should be heated to create sufficient clearance for free assembly.
7. This grade will develop temperature resistance after expose to heat cure as mentioned in heat curing graph.
8. Clean excess adhesive.
9. Cured adhesive can be removed with a solvent and mechanical abrasion such as wire brush.

Handling Precautions

- For safe handling My-T-Lok® 462 must be handled in a manner as indicated in Material

Safety Data Sheet (MSDS) and in compliance with relevant local regulations.

- My-T-Lok® 462 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-Lok® 462 can affect certain plastics particularly thermoplastic materials or coatings. It is recommended to check all surfaces for compatibility before use.
- My-T-Lok® 462 is non-volatile and non-flammable at room temperature.

Storage

- Store My-T-Lok® 462 in a cool, dry location in unopened containers at 25±2°C.
- Store away from sunlight and heat sources.
- My-T-Lok® 462 will exhibit a shelf life of 18 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 Or R&D Center.

Pack Size

My-T-Lok® 462 is ideally available in 50 ml and 250 ml pack size.

Note

All 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.

Continuous Product Improvement **CIP** is an important policy of the company and is an ongoing activity . As such we reserve the right to improve the performance of the product continuously by modifying the formulation in a manner that it enhances the performance functions.

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