

TECHNICAL DATA SHEET

My-T-Lok® 205

Master Gasket

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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® 205 is a single component, medium strength, general purpose face sealant which cures when confined in the absence of air between close fitting metal surfaces. My-T-Lok® 205 seals close fitting joints between rigid metal faces and flanges and provide resistance to low pressures immediately after assembly of flanges.

Special Feature:

- ❖ Provides resistance to low pressures instantly after assembly of flanges.
- ❖ The thixotropic nature avoids the migration of product after application to the substrate

Applications:

- ❖ General purpose face sealant product suitable for Sealing close fitting joints between rigid metal faces and flanges
- ❖ Used as a form-in-place gasket on rigid flanged connections, e.g. gearbox and engine casings etc.

Properties

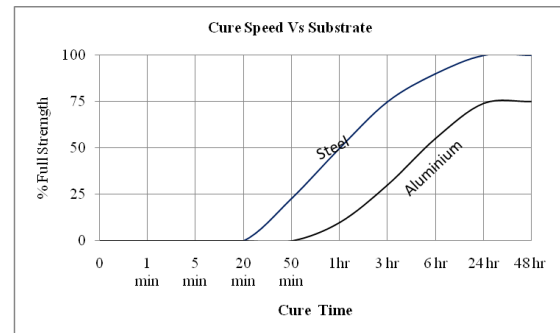
Technology	: Acrylic
Chemical Type	: Dimethacrylate ester
Components	: One component
Appearance	: Red
Specific Gravity @ 25 °C	: 1.13
Viscosity @ 25±2 °C,	: 80,000 -1,50,000 cP
Brookfield, Spindle #4, Speed 2.5 r.p.m.	
Cure	: Anaerobic
Secondary Cure	: Activator
Strength	: Medium
Service Temperature	: -50 °C to 150 °C
Application	: Gasket and Sealant

Curing Performance

The product 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.

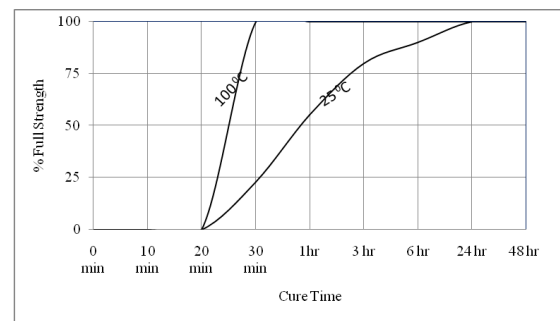
Cure Speed vs. Substrate

The rate of cure will depend on the substrate used. The graph below shows the shear strength developed with time on steel lap shears compared to different materials and tested according to ASTM D 1002.



Cure Speed vs. Temperature

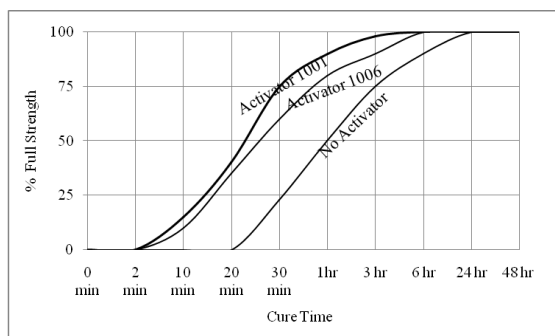
The rate of cure will depend on the ambient temperature. The graph below shows the shear strength developed with time on steel lap shears at different temperatures and tested according to ASTM D 1002.



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 below shows the shear strength developed with time on steel lap shears using different activators and tested according to ASTM D 1002.



Adhesive Properties of Cured Material

Lap Shear Strength, ASTM D 1002; After 24 hours @ 25±2 °C

Steel : 6-9 N/mm²

Tensile Strength, ASTM D 897; After 24 hours @ 25±2 °C

Steel : 3-6 N/mm²

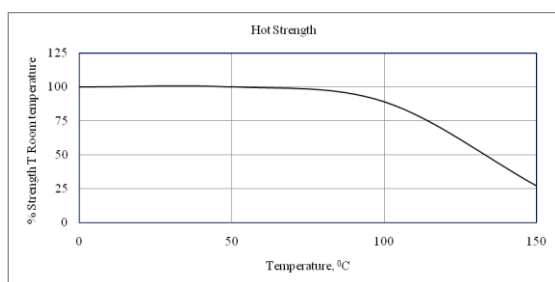
Compressive Shear Strength, BIS 13055:1991; After 24 hours @ 25±2 °C

Steel Pins and collars : 7-10 N/mm²
 Pressure Resistance test, After 24 hours @ 25±2 °C
 Flange Sealing test, : >100 bar
 Applying Hydraulic Pressure

Hot Strength

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

Tested at temperature indicated



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 (°C)	% of initial strength	
		100 hrs.	168 hrs.
Engine Oil	120	100	100
Gear Oil	120	100	100
Water Glycol (50/50)	87	100	96
Unleaded Petrol	25±2	70	60
Diesel	25±2	80	80

Directions for Use

1. For best performance bond surfaces should be clean and free from grease.
2. The product is designed for close fitting flanged parts.
3. Apply manually as a continuous bead to one surface of the flanges.
4. Low pressures may be used when testing to confirm a complete seal immediately after assembly and before curing.
5. Flanges should be assemble and tighten as required as soon as possible after assembly to keep away from shimming.
6. Clean excess adhesive.

Handling

- ❖ For safe handling My-T-Lok® 205 must be handled in a manner as indicated in Material Safety Data Sheet (MSDS) and in compliance with relevant local regulations.
- ❖ My-T-Lok® 205 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® 205 can affect certain plastics particularly thermoplastic materials or coatings. It is recommended to check all surfaces for compatibility before use.
- ❖ Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check for compatibility of the washing solution with the adhesive. In some cases these aqueous washes can affect the cure and performance of the adhesive.
- ❖ My-T-Lok® 205 is non-volatile and non-flammable at room temperature.

Storage

- ❖ Store product My-T-Lok® 205 in a cool, dry location in unopened containers at 25±2°C.
- ❖ Store away from sunlight and heat sources.
- ❖ My-T-Lok® 205 will exhibit a shelf life of 18 months from the date of manufacture 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-Lok® 205 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.

METLOK PRIVATE LIMITED

(Bonding and Sealing Solutions)

An ISO 9001: 2015 Certified Company

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