

TECHNICAL DATA SHEET

My-T-Bond® 2619

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METLOK PRIVATE LIMITED
(An ISO 9001 Certified Company)
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Product Description

My-T-Bond® 2619 is a heat curable one component high viscosity, industrial grade epoxy adhesive. This one component-no mix formulation develops tough bond which provides excellent mechanical strength and electric resistance and acts as an excellent electrical insulator.

Product Features:

- ❖ Excellent adhesion to wide range of substrates
- ❖ High bond strength
- ❖ Withstands heavy impact loads.
- ❖ Resistance to wide range of oils and solvents.
- ❖ Extremely durable and tough
- ❖ 100% reactive systems, which does not shrink over a period of time.

Applications:

- ❖ Applicable for bonding of dissimilar materials.
- ❖ Bonding plastic, metal, glass, wood, ceramic, and masonry materials where high strength is required.

Physical Properties

Technology	: Epoxy
Chemical type	: Epoxy
Component	: Single
Appearance	: White / Black
Sp. Gravity @ 25 °C	: 1.17 ±0.05
Viscosity @ 25±2°C,	: 150000-
Brookfield-DV-II, Spindle	200000 cP
no. 7, Speed 20 r.p.m.	
Cure	: Heat Cure
Cure Schedule @120 °C	: 60 minutes
@150 °C	: 15 minutes

Cure

My-T-Bond® 2619 can be cured for 60 minutes at 120 °C. Faster cures can be achieved by using higher temperatures. Cure time will depend upon factors such as part geometry, materials to be bonded, bond line thickness and efficiency of the oven. Cure schedule should be confirmed with actual production parts and equipment.

A clamping pressure of 15 psi is recommended to ensure that good contact is maintained during the cure cycle.

Cure schedule for open bead (usually used for sealing) is 15 minutes @150 °C whereas for strong structural bonding application cure schedule of 30 minutes @150 °C is recommended.

Adhesive Properties of Cured Material

Properties after **Heat cure@120 °C for 60 minutes** and cool to room temperature at 25±2 °C for 2 hours and tested @ 25±2 °C.

Lap Shear Strength, ASTM D 1002, N/mm²

Steel : 20-25

Tensile Strength, ASTM D 897, N/mm²

Steel : 18-22

Properties after **Heat cure@150 °C for 15 minutes** and cool to room temperature at 25±2 °C for 2 hours and tested @ 25±2 °C.

Lap Shear Strength, ASTM D 1002, N/mm²

Steel : 18-20

Tensile Strength, ASTM D 897, N/mm²

Steel : 15-20

Properties after **Heat cure@150 °C for 30 minutes** and cool to room temperature at 25±2 °C for 2 hours and tested @ 25±2 °C.

Lap Shear Strength, ASTM D 1002, N/mm²

Steel : 20-30

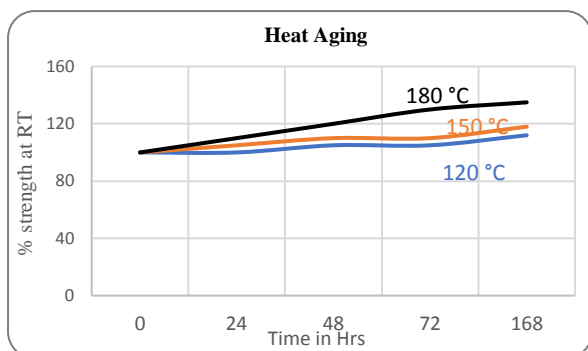
Tensile Strength, ASTM D 897, N/mm²

Steel : 20-25

Hardness, Durometer - Shore D : 80
ASTM D-2240

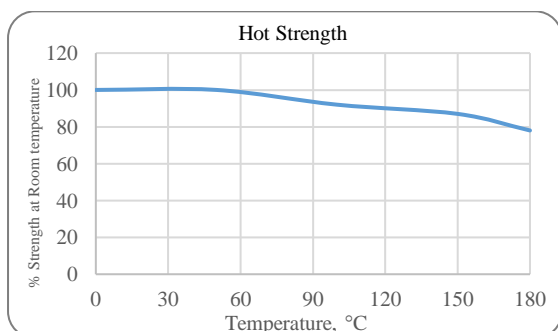
Heat Aging

Test : Lap Shear Strength, ASTM D1002
Substrate : Steel
Cure : 15 min @ 150 °C and cool to 25±2 °C for 2 hours and tested at temperature 25±2 °C.



Hot Strength

Test : Lap Shear Strength, ASTM D1002
 Substrate : Steel
 Cure : 15 min @ 150 °C and cool to 25±2 °C for 2 hours and tested at temperature indicated in graph



Thermal Cycling

Test : Cured for 15 min @ 150 °C and then @ 25±2 °C for 2 hours and then subjected to 120 °C to -50 °C alternatively for 5 cycles.
 Substrate : Steel

Strength : % Initial strength retained
 Overlap Shear : 100
 Tensile : 100
 Impact : 100

Chemical Resistance

Test : Lap Shear Strength, ASTM D 1002
 Substrate : Steel
 Cure : Cured for 15 min @ 150 °C and then @ 25±2 °C for 2 hours and then aged at conditions indicated and tested at 25±2 °C.

Environment	Temp (°C)	% Initial Strength Retained after
		100 hrs
Air	120	120
Gear oil	120	110
Engine oil	120	110
Brake fluid	25±2	100
Diesel	25±2	100

Direction for Use

- ❖ For the best performance, the surface should be clean, dry free from oils, paints and dust because the surface preparation is directly depends upon bonding strength and various mechanical properties
- ❖ Apply the adhesive with the help of clean glass rod or suitable means on the substrate
- ❖ To avoid skin contact use safety glove
- ❖ For maximum bond strength apply adhesives on both the surfaces and then wipe off the excessive adhesive
- ❖ During curing process make sure that the substrates remain intact, clamps may be used

Storage and Handling

- ❖ Store product in a cool and dry location in unopened container at 5 °C.
- ❖ My-T-Bond® 2619 will exhibit a shelf life of 6 months from the date of manufacture if stored as indicated above.
- ❖ To prevent contamination of unused product, do not return any material to its original container
- ❖ For further specific information, contact our Technical Service Team.

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.

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