

DMS-4-828

MOLDABLE SHIM MATERIAL

A product from DYNAMOLD

Approvals and conformities

DMS-4-828	MB 1733, MMM-A-1754
NSN	8030-01-298-3619 (50 g field kit), 8030-01-300-0796 (100 g field kit), 8040-00-944-7292 (200 g semkit), 8030-01-300-0797 (quart kit)
SAE	AMS 3726 Class 1, Type 1

DMS-4-828 moldable shims are filled epoxy resin compounds used to shim gaps in metal or composite assemblies. Originally developed for use in airframe assemblies, the moldable shims are now used in a wide variety of equipment alignment applications as well as land, air, and sea applications.

Packaging sizes:

Two-part (room temperature storage)

- 1 lb (pint), 3 lb (quart), and 10 lb (gallon) kits
- 200 g semkit/techkit mix in tube
- 50 g and 100 g two-part field kits with premeasured catalyst

USES

- Shimming gaps and offsets at the assembly level (metal and composites)
- Cast in place shim, forming complex contours on parts machined undersize at detail level
- Close tolerance molding to produce accurate and identical parts
- Repair of dents, holes, and faring applications
- Economical correction of tooling
- Alignment of heavy machine or motor parts
- Alignment of propulsion systems (marine applications, chocking)

DIRECTIONS FOR USE

APPLICATION OF DMS-4-828 TWO-PART SYSTEM

- Estimate the amount of shim material needed for the job.
- Weigh the required amount of base material (to the nearest gram) in a container that can be heated.
- Heat the weighed base material to room temperature 75-80°F (24-27°C).
- While base material is warming, weigh out the proper amount of catalyst into an inert container.
 - 14.4 parts catalyst per 100 parts base
- When base material has reached desired temperature, add measured amount of catalyst material and mix thoroughly. The DMS-4-828 Moldable Shim Material is now ready for use. The application time is

approximately 45 minutes depending on the temperature of the material and the temperature of the substrate to which it was applied.

- If a bubble-free mixture is required, the mixed material (base and catalyst mixture) can be centrifuged for three minutes at 1500 rpm at 75-80°F (24-27°C).
- The DMS-4-828 Moldable Shim Material is designed for room temperature cure. However, cure can be accelerated by moderate heating. Maximum properties can be obtained by heating to 120°F (50°C) for a period of two hours.

The DMS-4-828 Moldable Shim Material can also be supplied in 50 and 100 g field kits. It comes packaged in an aluminum “rip top” can with the pre-measured amount of catalyst packaged in a disposable syringe. To use the field kits, warm the base material to 75-80°F (24-27°C). Remove the “rip top” lid and empty the contents of the pre-measured syringe into the base material and mix thoroughly with the supplied spatula.

TECHNICAL CHARACTERISTICS

Product Name	Application Time*	Assembly Time*	Drill Time*	Cure Time*	Shelf Life & Storage Two-Part System
DMS-4-828	1h	2h	4-5h	8-9h	1 year at 40-100°F (4-38°C)

*Times are based on a standard temperature condition of 75°F (23°C).

Property	Standard Method	Value
Block compression/ultimate (psi)	ASTM D695	75°F (23°C) – 21500 190°F (88°C) – 17500 350°F (177°C) – 14000
Flatwise compression (psi)	AMS 3726	75°F (23°C) > 60000
Lap shear Aluminum (psi)	ASTM D1002	75°F (23°C) – 2700 250°F (121°C) – 1700 350°F (177°C) - 1300
Hardness Shore D	ASTM D2240	92
Specific gravity		<1.50

PRECAUTIONS FOR USE AND STORAGE

For more information regarding the danger of the product, please consult the product safety data sheet according to local regulation. Please address any questions or comments to Socomore North America technical support (techsupport-na@socomore.com).

For professional use only.

This technical data sheet replaces and cancels the previous one.

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