

[™] Structural Adhesive SA9822

Product Data Sheet

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Product Description

3M[™] SA9822 is a two-part epoxy based adhesive for the Automotive industry formulated for steel and aluminium Hem flange bonding applications.

SA9822 has a very wide process window and can be applied either under assembly or body-in-white conditions. It has good compatibility to stamp oils.

On oily substrates an induction curing after application is mandatory at low temperatures to accelerate the cure, thereby minimizing panel distortion

Key Features

- High bond strength with cohesive failure mode on steel and aluminium substrates
- Compatible with press and stamp oil's
- Excellent long-term durability (eg. heat, humidity and salt water)
- Controlled reactivity; balance of longer open time and proper lock-up eg. after induction
- Room temperature strength build-up
- Can be dispensed with commercially available dispensing systems
- Reduced emissions, vapours, odour (due to 99+% Solids)
- Contains glass beads (diameter 250-300µm)

Typical Uncured Properties

	Part B (Base)	Part A (Accelerator)	
Colour	Yellow	Beige	
Colour (mixed adhesive)	Yellow		
Solids [%]	>99	>99	
Density [g/cm³]	1,07	1,15	
Container sizes drums drums	182 l in 200 l 50 l in 60 l	182 l in 200 l 50 l in 60 l	
Dual-pack cartridges	400 ml		
Mix Ratio - by weight - by volume	3,72 B 4,0 B	1,0 A 1,0 A	
Mixing ratio tolerance -by weight	3,60 – 4,40 B : 1,0 A (±10%)		
Open Time	~30 minutes at re	~30 minutes at room temperature	
Clean-up	Uncured adhesive can be removed by scraping with a putty knife or similar tool. For cured material, remove by cutting.		

Typical Curing Properties

Induction pre-cure	~120°C with 450K/min. for 40 sec.	
Final cure	24h RT + 15min. at 180°C (substrate temp.)	

Performance Characteristics

Over-Lap Shear (OLS) DIN EN 1465; 24h RT + 30min. 180°C DX54D-Z100 Cleaning n-heptane + 3g/m² PL3802-39S; Overlap 25x10mm Test speed 10mm/min.	17 MPa
T-Peel Strength DIN EN 1464; 24h RT + 30min. 180°C DX54D-Z100 Cleaning n-heptane + 3g/m² PL3802-39S Test speed 100mm/min.	102 N/25mm
E-Module DIN EN ISO 527-1; 24h RT + 30min. 180°C	2307 MPa

Storage & Shelf Life

Store at 16°C - 23°C and 40-65% relative humidity in its original box. The product can be stored up to 6 months after production.

Note: The shelf life may be shortened if the original packaging is not properly sealed or stored in an environment with high temperatures or humidity.

Precautionary Information

Refer to product label and Material Safety Data Sheet for health and safety information before using the product.

For information please contact your local 3M Office.

www.3M.com

For Additional Information

To request additional product information or to arrange for sales assistance please see contact information below.

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3M Deutschland GmbH Automotive Laboratory

Carl - Schurz - Str. 1 41453 Neuss Telefon 0 21 31 / 14-35 80 Telefax 0 21 31 / 14-12-35 80