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**Material Technical Data Sheet**

**FORMOA 017FE**

Reviewed on 28 January 2006

**TECHNICAL CHARACTERISTICS**

Base	MS Polymer®
Consistency	Stable Paste
Curing System	Moisture Cure
Skin Formation (*)	Ca. 20 min. (20°C/65% R.V.)
Curing Rate (*)	3-4mm/24h (20°C/65% R.V.)
Hardness	60 + 5 Shore A
Change in Volume	<2%
Specific Gravity	1.44g/ml
Maximum Deformation	+ 20%
Paint Train Resistance to 180°C	At least 30 min. in paint trains at 200°C in wet-on-wet applications
Temperature Resistance (fully cured)	-40°C until +100°C
Elasticity Modulus	100% 1.5N/mm <sup>2</sup> (DIN 53504)
Tear Strength	>2.7N/mm <sup>2</sup> (DIN 53504)
Elongation at Break	>350% (DIN 53504)
Shear Strength	>1.7N/mm <sup>2</sup>
Substrate	AlMgSi1
Thickness	2mm
Shear Velocity	10mm/min

(\*)These values may vary depending on environmental factors, such as: temperature, moisture and type of substrates.

**PRODUCT**

Formoa 017FE is a high quality single component adhesive-sealant, with medium to high viscosity and very high adhesive strength. It is based on MS Polymer®, chemically neutral and fully elastic. For use in elastical structural bonding applications in the coach, caravan and aerospace industries, where a tough, flexible rubber is required.



## CHARACTERISTICS

- High performance mechanical properties
- Very high bond strength
- Quick build-up of end strength
- Long open time
- High sheer strength after full cure
- Does not contain isocyanates, silicone or solvents
- Can be sanded after full cure
- Flexible elastic rubber - movement accommodation up to 20%
- Suited for application in warm, humid climates
- No bubble formation within sealant
- Very easy to tool and finish
- Colour stable and UV resistant
- Can be painted wet-on-wet in paint trains with most industrial paints
- Withstands all climatic conditions
- Minimal health and safety considerations

## APPLICATIONS

- Structural elastic bonding between metal surfaces, coated surfaces and many plastics (not PE, PP or Teflon).
- Structural bonding applications in the: car, coach, caravan, marine, train and aerospace industries.
- Bondings which pass through paint tunnels.
- Structural bonding in vibrating constructions.
- Connection joints in sheet metal fabrication.

## PACKAGING

*Colour:* White, Black

*Packaging:* Cartridge 290ml, Foil Bag 600ml (on request)

## SHELF LIFE

12 months in unopened packaging, in a cool and dry storage place at temperatures between +5°C and +25°C.

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## BONDING

Formoa 017FE has excellent adhesion on many surfaces. The following metal surfaces have been tested: Steel, AlMgSi1, Brass, Electrogalvanised Steel, AlCuMg1, Firegalvanised Steel, Steel ST1403. Excellent adhesion as well on many plastics: Polystyrene, Polycarbonate (Marcolon®, Lexan®), PVC, ABS, Polyamide, PMMA, GRP, Fibre Reinforced Epoxy and Polyester. Please remove protective films from plastic surfaces, prior to application of Formoa 017FE. No adhesion on: PE, PP, and PTFE (Teflon)

## RESISTANCE TO CHEMICAL AGENTS

Good resistance to water, aliphatic solvents, mineral oils, grease, diluted inorganic acids and alkalis. Poor resistance to aromatic solvents, concentrated acids and chlorinated hydrogens.

## SUBSTRATES

*Nature:* Clean, dry and free of dust and grease.  
*Priming:* We recommend the use of Formoa Surface Activator on non-porous surfaces.

We recommend preliminary compatibility tests prior to application.

## BONDING LAYER

We recommend a bonding layer of at least 2mm.

## HEALTH AND SAFETY RECOMMENDATION

Apply the usual industrial hygiene.

## Remarks

Formoa 017FE may be overpainted with most types of lacquer used in industrial applications, however, due to the large number of paints and varnishes available, we strongly advise a compatibility test before application. The drying time of alkyd resin based paints may increase. Formoa 017FE can be applied to a wide variety of substrates. Due to the fact that specific substrates, such as: plastics, polycarbonates, etc, may differ from manufacturer to manufacturer we recommend preliminary compatibility tests. The directives contained in this document are the result of our experiments and of our experience and have been submitted in good faith. Because of the diversity of the materials and substrates and the great number of possible applications which are out of our control, we cannot accept any responsibility for the results obtained. In every case it is recommended to carry out preliminary experiments.