

M 8216 Plastic Aluminium

M 8216 is special two component adhesive, **fast curing in cold**, **polymer adhesive** having an excellent tenacity destined for fast reparation, constructional applications with open handling time, **filled with aluminium and titanium dioxide**.

M 8216 is suitable for bonding and reparation broad range of different surfaces incl. aluminium, aluminium alloy, steel, PVC, polyester, polycarbonate and zinc-coated iron.

M 8216 offers you an excellent tenacity, solidity, elasticity. It is specially suited for using in engineering, electronic (fibre-glass) and car industry and repair business. M 8216 is advised for aluminous and steel castings, conduite, pump casing, damaged flanges, keyseats of cast-iron components etc.

M 8216 is good temperature resistant 140 -145° C (longterm) and 170 - 180° C (short-term).

- **4** High temperature resistant
- **♣** Filled with aluminum and titanium dioxide
- Easy to use
- **High chemical resistant**
- **↓** Viscous doesn't run down
- Fast curing
- **♣** Not fragile doesn't crack
- **Temperature expansivity such as aluminum**

Aplication methods:

- For better tenacity is suitable rough the surface (grinding machine, wire brush, rasper) and recess.
- Bonding surfaces must be clean and clear of fat, power and further impurities. Degrease with S 1950, S 1960.
- Mix the same quantity (weighted and voluminous) of both components and throughly mix
- Apply to 1 surface and put both surfaces together under a small pressure.
- Remove the overflowing material before curing.
- Leave it to cure at room temperature at least 30 minutes at 20°C.
- Final curing come in 24 hours at 20° C.
- After 20 hours can be drilling, scurfing, coating or another way working.





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Typical adhesive charakteristics:

Physical form : viscous fluid

Chemical type : component 1: resin with aluminum and additives

component a 2: polymer with titanium dioxide

Colour : component 1: light grey - aluminium

component 2: white

Density : component 1: 1,70-1,85

component 2: 1,70-1,80

Hardness Shore D 24 hours : 70 - 80

Viscosity /poise @ 25°C/: component 1: 13000 – 15000 cps, component 2: 40000 –

45000 cps

Mixture proportion : 1:1

Gelatination time : 15 minut, úplné vytvrzení za 1 hod.

Temperature resistance : -40 + 140°C till + 180°C

Curing:

M 8216 cure minimally at $+5^{\circ}$ C, must be expected longer time than at $20 - 25^{\circ}$ C.

Temperature influence accelerates grade of curing.

♣ Working time at 20 až 25°C is 3 - 4 minutes.

♣ Gelatination time at 20 till 25°C is 5 - 6 minutes.

♣ Get dry on the surface at 20 till 25°C is 10 - 15 minutes.

↓ Handling time at 20 till 25°C is 30 minutes.

↓ Final solidity at 20 till 25°C is 24 hours.

Exothermic top (100g mass) is 95 – 100°C

Typical commissure characteristic:

Tensile strength at break: $470 - 520 \text{ kg/cm}^2$ (ASTM D 638)

Bending resistance: $550 - 650 \text{ kg/cm}^2 \text{ (ASTM D 790)}$

Strength on steel: $32-34 \text{ kg/cm}^2 \text{ (ASTM C 482)}$

Compressive strength: $550 - 650 \text{ kg/cm}^2 \text{ (ASTM D 695)}$

Bond strength M 8216: Substrates Kg/cm²

steel- steel 276 - 342 polyester-polyester 31

aluminum – aluminum 284 hard PVC- hard PVC 35 substrate was broken

copper - copper214ABS-ABS27stainless steel - stainless steel 194styrol-styrol14

brass – brass 208 epoxy FRP-epoxy FRP 84 substrate was broken chrome - chrome 132 fenol FRP-fenol FRP 65 substrate was broken

nickel - nickel 163 zinc – zinc 187

<u>Chemical resistance:</u> Good chemical resistance even to concentrated acids and alkali, oils and petrol.

Packaging

M 8216 is supplied in 25 ml syringe cartouches.

Storage

If the product M 8216 is dry placed in closed vessels stocking at the temperature between 5 and 25° C, the storage will be 12 months.

Health and safety

This TDS doesn't contain MSDS. Read the Material Data Sheets of M 8216 before using.

Supplied by:



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