

TECHNICAL INFORMATION

BEST-MA 1044

DESCRIPTION

BEST-MA 1044 is a two component adhesive based on modified metacrylatester. Recommended for applications where standard adhesives do not provide sufficient strength. The adhesion is heat-, weather, humidity- and chemical resistant. Suitable for metals, ceramics, glass, wood, rubber, natural rubber, hard plastics, steel, ABS, alloy, PVC, carbon, chrome and many other materials. Due to the high viscosity the adhesive is easy to apply and suitable for working on vertical surfaces. After curing it can be grinded and coated and has a high resistance to impact and shear resistance.

TYPICAL APPLICATION

BEST-MA 1044 is recommended for all applications where a fast and high strength adhesion of different components is required.

Suitable for structural joining of metals, plastics, composite bonding and on ceramics where high impact strengths are needed. Applications include wind turbine, boat building, machine building, vehicle roofs, fibreglass, sports goods, automotive spoilers, vents, housings, model making, illumination products.

Applications in the automotive field are:

Inside: Bonding of dashboards, airbag-body, side carpeting, glove compartment, ceiling, seats, handholds, sealing of gaps and holes

Outside: bumper, spoiler, wing mirror, cooling unit, auto body sheet steel, lamps, roof elements, reinforcing floor section, surface treatment, knobs and scratches.

DIRECTIONS FOR USE

The surfaces do not require a specific pre-treatment and is even applicable on unclean surfaces. However a better adhesion results when surfaces are dry, clean and free from dust and grease.

The BEST-Clean 2000 is recommended. No curing below 3°C.

Resin A and curing agent B need to be mixed thoroughly in 1:1 proportion.

SOLVENT AND ENVIRONMENTAL RESISTANCE

Excellent Resistance to:

- Hydrocarbons
- Acids and Bases (3-10 ph)
- Salt Solutions

Heat ageing properties

As a % initial strength

Hours	500	1000	2000	°C
100% RH @20°C	90	95	98	@60°C
100% RH @23°C	65	55	60	@70°C

TYPICAL UNCURED PROPERTIES for BEST-MA 1044

Activator Colour: Amber like Gel
Adhesive Colour: Off white Gel
Activator SG @ 25°C: 0.95 approx
Adhesive SG @ 25°C: 0.97 approx
Viscosity: 40,000 – 60,000 cps
Flash Point (TCC) >10°C

Operating Temperature: -40°C to + 120°C

BEST-MA 1044 *will resist higher temperatures occasionally*

PROPERTIES BEST-MA 1044

Appearance: Pale Yellow
Working time: 4-6 Mins
Fixture time: 12-15 Mins
Mix ratio: 1-1 Mixture
Gap Fill: Up to 4.5mm

BEST-MA 1044 PERFORMANCE DATA

Hardness: Approx.: 75 shore D
Average shrinkage: <5%
ASTM D1002 Lap shears
On steel/steel: Up to 30 N/mm²
On aluminium/aluminium: Up to 27 N/mm²
On polycarbonates: Up to 13 N/mm² **
On ABS/ABS: Up to 8 N/mm² **

** Substrate failure

Terminology

- Open Time – The time interval between application of adhesive to substrate, and the possible assembly of the two mating parts @ 20 Deg C
- Fixture Time – The length of time after the substrate assembly that will allow a joint to support a 1kg dead weight. (Tested on a 12mm x 25mm overlapped joint @ 20 Deg C)

Note

- Chemical Resistance can vary greatly due to a number of exposure parameters including: Temperature, Concentration, Duration of exposure, and bond line thickness.

General

The data and information above correspond to the current know-how of BEST-Klebstoffe GmbH & Co. KG. Our information and data have been developed from laboratory tests and extensive practical experience. They shall not release any customer from its duty to perform receiving inspections and to do test runs in view of any intended use, nor do they constitute a representation that any product will have specific properties or be suitable for any definite use.

BEST-Klebstoffe GmbH & Co. KG reserves the right to change the contents of this document as necessary.

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