

CEYS METAL EPOXY

Product description

Technology	Epoxy
Chemistry	Epoxy
Appearance	White paste (resin, part A) Black paste (hardener, part B)
Components	2k (Resin and hardener)
Viscosity	Medium
Mix ratio	By weight 1:1 By volume 1:1
Curing process	At room temperature after mixing

CEYS Rapid Epoxy is a two-component epoxy-based adhesive performing clear and fast curing for bonding applications on a wide range of substrates, including metals, composites, ceramic, concrete or plastics, among others.

Typical properties of uncured material

Density of mixture, 25 °C, g/cm ³	1.20
Density of resin, 25 °C, g/cm ³	1.14
Density of hardener, 25 °C, g/cm ³	1.16
Viscosity, Brookfield, 25 °C, mPa·s (cP)	
Resin A	(Range) 12,000 – 18,000 (Value) 14,000
Hardener B	(Range) 13,000 – 19,000 (Value) 15,000

Typical curing performance

Working life (min)	20
Setting time (min)	5
Tack free time (min)	65
Full cured time (hours)	24
Tensile strength (MPa, psi @ 20 min)	14.03
Tensile Elongation (%)	2.15
Temperature range (°C)	-40 to 140
Glass transition temperature, T _g (°C)	41 – 48

Tensile Lap Shear strength (ISO 4587) after curing 16 hours @ 40 °C and tested at 23 °C and 50% rh.

Aluminium	N/mm ²	14.0
Copper	N/mm ²	7.0
Steel 37/11	N/mm ²	15.0
Stainless Steel V4A	N/mm ²	12.0
Galvanized steel	N/mm ²	13.0
Brass	N/mm ²	7.0
Polyamide	N/mm ²	2.0
PVC	N/mm ²	3.0
Polycarbonate	N/mm ²	4.5
PMMA (Polymethyl methacrylate)	N/mm ²	3.0
ABS	N/mm ²	4.0
SMC (Sheet Moulding Compound)	N/mm ²	7.0
CFRP (Carbon Fiber Reinforced Plastic)	N/mm ²	8.0
GRP (Glass Reinforced Plastic)	N/mm ²	9.0

Directions for use

Surface pre-treatment:

All substrates should be clean and dry, and free from oil, dust, rust, paint, mould or grease before applying the adhesive to ensure a high-performance structural bond. To clean surfaces, the use of alcohol or acetone and a cloth, preferably cotton, are recommended.

Application:

1. Remove the cap of the syringe.
2. Dispense the both components pushing the plunger of the syringe.
3. Mix thoroughly both components with the aid of the spatula until the colour of the mixing becomes homogeneous (1 minute).
4. Apply the mixture to both surfaces and close the bonding.
5. Remove the excess of adhesive immediately with the aid of a cotton fabric or paper.
6. Hold tight both parts of the bonding at least for 5 minutes to ensure the initial fixing.

Limitation

CEYS Rapid Epoxy is not recommended for its use in presence of pure oxygen and/or other oxygen rich systems and should not be used as a sealant for chlorine or other strong oxidizing species.

Presentation

CEYS Metal Epoxy is supplied in a ready-to-use double syringe of 24 ml (Ref. 510230).

Storage and shelf life

CEYS Metal Epoxy shall be ideally stored in a cool, dry location in its unopened container at a temperature between 8 and 28 °C. Optimal storage is at the lower half of this temperature range. Shelf life is guaranteed for 36 months in described conditions.

Safety

Keep out of reach of children. For safety information refer to our Safety Data Sheet (SDS).

The user shall take ultimate responsibility for determining the final suitability of the product in all types of application.

The data indicated in this Technical Sheet should never be considered as a specification of the properties of the product.

We guarantee the uniform properties of our products in all supplies. The recommendations and data published in this technical sheet are based on our current knowledge and rigorous laboratory tests. Due to the multiple variations in the materials and the conditions of each project, we ask our customers to carry out their own utility tests under the foreseen working conditions and following our general instructions. This prevents further damages, whose consequences would be foreign to the company.