

LiqRep Metal

2C-liquid metal compound

Description and applications

LiqRep Metal is an epoxy resin liquid metal compound made up of two components. The components are automatically mixed by a mixing nozzle when the adhesive is applied to the correct mixing ratio. The output takes place via a manual dosing gun.

The liquid metal compound is ideally suited for assembly or repair (sealing, filling, levelling, bonding) of e.g. incorrect bores, threads, holes, cracks or blowholes. The repair points can be mechanically machined after curing (2–3 hours) (drilling, thread cutting, turning, milling, grinding) and can be coated.

The liquid metal mass bonds excellently on metals (steel, stainless steel/V2A, aluminum, copper, brass) but also on a variety of other materials.



1. Technical data

| | |
|--|---|
| Color | Metal colors |
| Working temperature | Optimally at +22 °C |
| Processing time / pot life | 4–6 minutes |
| Hand-tight | 10–12 minutes |
| Mechanical processing and overpaintability after complete curing | 2–3 hours |
| Resistant to | Water, salt water, oil, solvents, Coolant agent and many chemicals, fuel (short-term), UV light (conditional) |
| Chemical basis | Epoxy resin |
| Components A: / B: | A: Resin / B: Hardener |
| Viscosity (At 25 °C, Brookfield viscosimeter) | A + B: 20 000 mPAS – 25 000 mPAS |
| Density (Measured in accordance with DIN 53217, part 2 density sphere model 475/III) | A + B: 1.3 g/ml |

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1. Technical data

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|--|-------------------------|
| Tensile shear strength On aluminum | 14–18 N/mm ² |
| Temperature resistance | -30 °C to +120 °C |
| Shore hardness D (ASTM D638) | 85 Sh–90 Sh |
| Gap filling capacity | Up to 10 mm |

2. General information

2.1 Areas of application

- Excellent adhesion on a wide range of materials:
 - Metals (e.g. steel, stainless steel/V2A, aluminum, copper, brass)
 - Plastics (e.g. PMMA, ABS, PC, PVC, PA6, HPL, PS, GFRP)
 - Various rubber/elastomers
 - Wood, stone and glass
- Not suitable for low-energy plastics such as PP, PE and PTFE
- Forms a very hard and brittle connection typical of epoxy resin with limited vibration tolerance.

2.2 Safety instructions

- Observe the safety data sheet and all safety instructions.
- Wear protective equipment such as protective gloves, protective clothing, face mask and eye protection.
- Only use in a well-ventilated location. Avoid breathing in fumes.
- Application by specialist personnel.
- Disposal of the product in accordance with official regulations.
- More information can be found in our Elring application video.

2.3 Application

- The optimum working temperature is approx. 23 °C.
- The surfaces must be bare, free of oil, grease, dirt or other impurities. Clean with isopropyl alcohol if necessary. If possible, sand the surfaces slightly beforehand.
- Screw the sealing cover on the 2C liquid metal cartridge 90° counter-clockwise and remove the cover at an angle.

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2.3 Application

- Mixing nozzle on the cartridge opening and turn 90° to the lock clockwise.
- Inserting the 2C liquid metal cartridge into the dosing gun.
- Discharge of the 2C liquid metal compound via the mixing nozzle. Please discard of a small quantity of material (approx. 2 cm). This ensures complete mixing of both components in the mixing nozzle.
- Apply the liquid metal mass to the assembly or repair point or top up the filling gap and process it within 4 to 6 minutes (fill, level).
- The maximum gap filling is 10 mm per work step. For larger filling points, please proceed in several work steps.
- No longer move after starting the curing process. Fix the parts to be connected if necessary.
- Sandable and overpaintable after complete curing after 2–3 hours.

2.4 Storage and durability

- Store unopen, cool, dry and dark at +10 °C to +25 °C.
- Maximum shelf life: unopened 15 months.
- Higher storage temperatures can reduce service life.

2.5 Delivery form

| Item no. | Package contents | Fill quantity | VPE | CLP Label |
|----------------|---|-------------------------------|--|---|
| B53.810 | 2C cartridge Incl. mixing nozzles | 50 ml - | 1 unit 2 units | AE AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IT LT LU LV MT NL NO PL PT RO RU SE SK SL TR UA |
| B50.970 | Mixing nozzles Bulk pack | - | 10 units | |
| B50.960 | Dosing gun for 50 ml cartridge | - | 1 unit | |
| B50.950 | 2C cartridge Plastic 2C cartridge Metal Incl. mixing nozzles Incl. Dosing gun for 50 ml cartridge | 50 ml 50 ml - - - | 1 unit 1 unit 10 units 1 unit | AE AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IT LT LU LV MT NL NO PL PT RO RU SE SK SL TR UA |

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2.6 Safety data sheets / application video

Safety data sheets



Application video
LiqRep Plastic



Application video
LiqRep Metal



2.7 Exclusion of liability

The above specifications in this technical data sheet, in particular the suggestions for processing and usage of our products, are based on our current knowledge and experience.

As a result of the varied possible uses and the fact that the usage and working conditions are outside our area of influence, we accept no liability for the suitability of our products for a particular production process under specific working conditions, or for the intended processing purposes and results. To ensure suitability, we recommend that adequate independent trials and tests are always performed in advance.

Any liability resulting from the information in this technical data sheet and from other written or verbal advice for the product in question is explicitly excluded, unless a case of injury, death or health problems arises that is due to intent or gross negligence on our part, or we are subject to liability under mandatory product liability law.