

# WEICON C Epoxy Resin



**liquid  
aluminium-filled  
up to +220°C (+428°F) high temperature resistant**

Temperature resistant and liquid epoxy resin system, specially for the industrial use. Non-corrosive, anti-magnetic, cures practically without shrinkage.

WEICON C is particularly suitable as an adhesive for large-scale applications, for pouring out moulds and for the production of fixing devices and tools (e.g. injection moulds). It can be used in the tool and mould making sector, as well as in many other industrial areas subjected to high thermal stress.

## Technical Data

|                                                                 |                              |
|-----------------------------------------------------------------|------------------------------|
| Composition                                                     | Epoxy resin aluminium-filled |
| Specific Properties                                             | liquid, high temp. resistant |
| Colour after curing                                             | grey                         |
| Mixing ratio by weight resin/hardener                           | 100:8                        |
| Density of the mixture (200g preparation)                       | 1,62 g/cm <sup>3</sup>       |
| Viscosity of the mixture                                        | 25.000 mPa·s                 |
| Consumption at a coating thickness of 1,0 mm                    | 1,62 kg/m <sup>2</sup>       |
| Maximum layer thickness for each working step                   | 60 mm                        |
| Pot life at +20°C (+68°F) 200g preparation                      | 60 min.                      |
| Curing time mechanical loads                                    | 24 h                         |
| Final hardness after                                            | 48 h                         |
| Mean strength at +25°C (+77°F) acc. to DIN EN 1465/ASTM D 1002: |                              |
| Pressure                                                        | 140 Mpa                      |
| Pull                                                            | 25 Mpa                       |
| Bending                                                         | 77 Mpa                       |
| E-Modul                                                         | 5.800 - 6.000 Mpa            |
| Shore D (ATSM D 1706)                                           | 90                           |
| Shrinkage                                                       | 0,01 %                       |

### Note

The specifications and recommendations given in this technical data sheet must not be seen as guaranteed product characteristics. They are based on our laboratory tests and on practical experience. Since individual application conditions are beyond our knowledge, control and responsibility, this information is provided without any obligation. We do guarantee the continuously high quality of our products. However, own adequate laboratory and practical tests to find out if the product in question meets the requested properties are recommended. A claim cannot be derived from them. The user bears the only responsibility for non-appropriate or other than specified applications.

|                                     |                            |
|-------------------------------------|----------------------------|
| Tg after curing at room temperature | 61,1 Tg (°C)               |
| Tg after tempering (at 120 °C)      | 129,5 Tg (°C)              |
| Thermoforming resistance            | +130 °C                    |
| Temperature resistance              | -35 to +220 °C             |
| Resistivity                         | 4,97 * 10 <sup>12</sup> Ωm |
| Thermal diffusivity (23°C)          | 0.408 mm <sup>2</sup> /s   |
| Thermal conductivity                | 0,60 W/m·K                 |
| Specific heat capacity              | 0,897 J/(g·K)              |
| ISSA-Code                           | 75.509.07/08               |
| IMPA-Code                           | 812903/04                  |

Information about surface pre-treatment and processing can be found in the manual.

\*To achieve a permanently high temperature resistance, we recommend to temper-harden after 48 hours as detailed below: 2 h at +40°C, 2 h at +60°C, 2 h at +80°C, 2 h at +100°C, finally 14 h at +120°C

## Storage

Store WEICON Plastic Metal at room temperature (but up to max. +25°C) in a dry place. Unopened containers can be stored for 18 months at temperatures from +18 to +28°C (Epoxy Resin Putty max. 3 years). Opened containers should be used within 6 months.

## Safety and health

When using WEICON products, the physical, safety technical, toxicological and ecological data and regulations in our EC safety data sheets ([www.weicon.com](http://www.weicon.com)) must be observed.

## Available sizes:

|          |                             |
|----------|-----------------------------|
| 10100002 | WEICON C Epoxy Resin 0,2 kg |
| 10100005 | WEICON C Epoxy Resin 0.5 kg |
| 10100020 | WEICON C Epoxy Resin 2.0 kg |

## Accessories:

|          |                                     |
|----------|-------------------------------------|
| 10850005 | Glass Fibre Cloth Tape, 50 mm x 1 m |
| 10953001 | Processing Spatula, short           |
| 10953003 | Processing Spatula, long            |
| 10953010 | Stirrer Stainless Steel,            |
| 10953020 | Contour Spatula Flexy,              |