# **Technical Datasheet**

Create Date: 03 01 2018 - Seite 1/



# 2K-Epoxy-System Type F



### pasty aluminium-filled non-corrosive and anti-magnetic

2K-Epoxy-System Type F is particularly suited for applications on components made from aluminium, aluminium alloys, magnesium and other light metals.

2K-Epoxy-System Type F can be used for inexpensive repairs of all types, for filling in blowholes on light metal castings and for the reconstruction of components.

2K-Epoxy-System Type F can be used in tool construction, model and mould making, and in many other industrial applications.

#### **Technical Data**

| Colour after curing         aluminium           Mixing ratio by weight resin/hardener         100:20           Density of the mixture (200g preparation)         1,6 g/cm           Viscosity of the mixture         880.000 mPa*           Consumption at a coating thickness of 1,0 mm         1,60 kg/m           Maximium layer thickness for each working step         10 mn           Pot life at +20°C (+68°F) 200g preparation         60 min           Curing time mechanical loads         16 l           Final strength after         24 l           Mean strength at +25°C (+77°F) acc. to DIN 53281-83 ASTM D 1002:           Pressure         61 Mpa           Bending         37 Mpa           E-Modul         1.500 - 2.000 Mpa           Shore D (ATSM D 1706)         8-           Shrinkage         0,02 %           Thermoforming resistance         +60 °C   | Composition   | Epoxy resin aluminium-filled |
|---|---|------------------------------|
| Mixing ratio by weight resin/hardener 100:20  Density of the mixture (200g preparation) 1,6 g/cm  Viscosity of the mixture 880.000 mPa-4  Consumption at a coating thickness of 1,0 mm 1,60 kg/m  Maximium layer thickness for each working step 10 mm  Pot life at +20°C (+68°F) 200g preparation 60 min  Curing time mechanical loads 16 life is strength after 24 life is mean strength at +25°C (+77°F) acc. to DIN 53281-83 ASTM D 1002:  Pressure 61 Mpa  Bending 37 Mpa  E-Modul 1.500 - 2.000 Mpa  Shore D (ATSM D 1706) 8-10 min 100 | Specific Properties                                   | pasty                        |
| Density of the mixture (200g preparation)  1,6 g/cm  Viscosity of the mixture  880.000 mPa-4  Consumption at a coating thickness of 1,0 mm  1,60 kg/m  Maximium layer thickness for each working step  10 mn  Pot life at +20°C (+68°F) 200g preparation  60 min  Curing time mechanical loads  16 l  Final strength after  24 l  Mean strength at +25°C (+77°F) acc. to DIN 53281-83 ASTM D 1002:  Pressure  61 Mpa  Bending  37 Mpa  E-Modul  1.500 - 2.000 Mpa  Shore D (ATSM D 1706)  8-  Shrinkage  0,02 %  Thermoforming resistance   | Colour after curing                                   | aluminium                    |
| Viscosity of the mixture 880.000 mPast Consumption at a coating thickness of 1,0 mm 1,60 kg/m Maximium layer thickness for each working step 10 mm Pot life at +20°C (+68°F) 200g preparation 60 min Curing time mechanical loads 161 Final strength after 241 Mean strength at +25°C (+77°F) acc. to DIN 53281-83 ASTM D 1002:  Pressure 61 Mpa Bending 37 Mpc E-Modul 1.500 - 2.000 Mpc Shore D (ATSM D 1706) 84 Shrinkage 0,02 % Thermoforming resistance +60°C  | Mixing ratio by weight resin/hardener                 | 100:20                       |
| Consumption at a coating thickness of 1,0 mm  1,60 kg/m  Maximium layer thickness for each working step  10 mm  Pot life at +20°C (+68°F) 200g preparation  60 min  Curing time mechanical loads  16 l  Final strength after  24 l  Mean strength at +25°C (+77°F) acc. to DIN 53281-83 ASTM D 1002:  Pressure  61 Mpa  Bending  37 Mpa  E-Modul  1.500 - 2.000 Mpa  Shore D (ATSM D 1706)  8a  Thermoforming resistance  | Density of the mixture (200g preparation)             | 1,6 g/cm <sup>3</sup>        |
| Maximium layer thickness for each working step 10 mm  Pot life at +20°C (+68°F) 200g preparation 60 min  Curing time mechanical loads 16 l  Final strength after 24 l  Mean strength at +25°C (+77°F) acc. to DIN 53281-83 ASTM D 1002:  Pressure 61 Mpc  Bending 37 Mpc  E-Modul 1.500 - 2.000 Mpc  Shore D (ATSM D 1706) 86  Shrinkage 0,02 %  Thermoforming resistance +60°C   | Viscosity of the mixture                              | 880.000 mPa·s                |
| Pot life at +20°C (+68°F) 200g preparation         60 min           Curing time mechanical loads         16 l           Final strength after         24 l           Mean strength at +25°C (+77°F) acc. to DIN 53281-83 ASTM D 1002:           Pressure         61 Mpa           Bending         37 Mpa           E-Modul         1.500 - 2.000 Mpa           Shore D (ATSM D 1706)         8a           Shrinkage         0,02 %           Thermoforming resistance         +60 °C   | Consumption at a coating thickness of 1,0 mm          | 1,60 kg/m²                   |
| Curing time mechanical loads         16 I           Final strength after         24 I           Mean strength at +25°C (+77°F) acc. to DIN 53281-83 ASTM D 1002:           Pressure         61 Mpc           Bending         37 Mpc           E-Modul         1.500 - 2.000 Mpc           Shore D (ATSM D 1706)         8c           Shrinkage         0,02 %           Thermoforming resistance         +60°C  | Maximium layer thickness for each working step        | 10 mm                        |
| Final strength after 24 I  Mean strength at +25°C (+77°F) acc. to DIN 53281-83 ASTM D 1002:  Pressure 61 Mpa  Bending 37 Mpa  E-Modul 1.500 - 2.000 Mpa  Shore D (ATSM D 1706) 86  Shrinkage 0,02 %  Thermoforming resistance +60 °C  | Pot life at +20°C (+68°F) 200g preparation            | 60 min.                      |
| Mean strength at +25°C (+77°F) acc. to DIN 53281-83 ASTM D 1002:  Pressure 61 Mpa  Bending 37 Mpa  E-Modul 1.500 - 2.000 Mpa  Shore D (ATSM D 1706) 8-  Shrinkage 0,02 %  Thermoforming resistance +60 °C   | Curing time mechanical loads                          | 16 h                         |
| Pressure         61 Mpz           Bending         37 Mpz           E-Modul         1.500 - 2.000 Mpz           Shore D (ATSM D 1706)         8c           Shrinkage         0,02 %           Thermoforming resistance         +60 °C  | Final strength after                                  | 24 h                         |
| Bending   37 Mps  | Mean strength at +25°C (+77°F) acc. to DIN 53281-83 A | ASTM D 1002:                 |
| E-Modul 1.500 - 2.000 Mpz Shore D (ATSM D 1706) 8- Shrinkage 0,02 % Thermoforming resistance +60 °C   | Pressure  | 61 Mpa                       |
| Shore D (ATSM D 1706)         8-6           Shrinkage         0,02 %           Thermoforming resistance         +60 °C  | Bending   | 37 Mpa                       |
| Shrinkage 0,02 % Thermoforming resistance +60 °C  | E-Modul   | 1.500 - 2.000 Mpa            |
| Thermoforming resistance +60 °C   | Shore D (ATSM D 1706)                                 | 84                           |
|   | Shrinkage   | 0,02 %                       |
| Temperature resistance -35 to +120 °C   | Thermoforming resistance                              | +60 °C                       |
|   | Temperature resistance                                | -35 to +120 °C               |

IMPA-Code 81 29 21/22

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

#### Storage

Store 2K-Epoxy-System Type F 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 +25°C (Epoxy Resin Putty max. 3 years). Opened containers should be used within 6 months.

# Safety and health

When using products, the physical, safety technical, toxicological and ecological data and regulations in our EC safety data sheets must be observed.

# Technotopogs FZCO