



ASSYST sprl / A.S.O.W. sprl
 Hellegatstraat 13a - 2590 Berlaar - Belgium
 Tel: +32 495 50 61 14 / +32 496 83 70 27
 Website: www.assyst.org / www.artsuppliesonweb.com
 Email: ao@assyst.org / vera.opsommer@assyst.org

MODELLING EPOXY PE 664 + HARDENER IPE 764

DESCRIPTION:

Epoxy paste filled with carbon fibres, malleable and rollable. Two-component epoxy system with contrasting colour for mixing control. Low density, high dimensional stability.

APPLICATION:

Medium-sized and large cartridges with high thermal resistance (up to 100°C) and with high mechanical resistance.

PROCESSING:

Manual or mechanical mixing. Manual application on calibrated thickness. Curing at room temperature. Post curing is necessary if manual application is done at elevated temperatures.

SYSTEM SPECIFICATIONS:

Resin PE 664

- | | |
|---------------------|----------------|
| ✓ Viscosity at 25°C | paste |
| ✓ Colour | grey |
| ✓ Density at 25°C | 0.40-0.45 g/ml |

Harder IPE 764

- | | |
|---------------------|----------------|
| ✓ Viscosity at 25°C | 90-130 mPas |
| ✓ Colour | blue |
| ✓ Density at 25°C | 0.99-1.01 g/ml |

CHARACTERISTICS OF THE TYPICAL SYSTEM:

Processing data:

- | | |
|---|-----------|
| ✓ Mixing ratio by weight | 100:20 |
| ✓ Processing time (500 ml, 80 mm, 25°C) | 25-30 min |
| ✓ Gelling time at 25°C (15ml; 5mm) | 3-4 u |
| ✓ Exothermic peak (500 ml, 80 mm, 25°C) | 155-165°C |
| ✓ Curing (15 ml, 5 mm, 25°C) | 10-12 u |
| ✓ Post-curing at 60°C (optional) | 12-15 u |
| ✓ Maximum recommended thickness | 15 mm |

TYPICALLY CURED SYSTEM PROPERTIES:

Properties determined on cured samples: 24 h KT (room temperature) + 15 h 60°C

- | | |
|---|------------------|
| ✓ Colour | grey-blue |
| ✓ Machinability of tools | poor |
| ✓ Density at 25°C | 0.50-0.55 g/ml |
| ✓ Hardness at 25°C | 65-70 shore D/15 |
| ✓ Glass transition | 105-110°C |
| ✓ Maximum recommended operating temperature | 100°C |

INSTRUCTIONS:

Prepare the surface of the mould by applying detergent 2 or 3 times (refer to the data sheet for the release agent). Mix the two components (resin and hardener), if necessary pre-filled, in the correct mixing ratio to avoid air entrapment until a homogeneous mixture is obtained, and then pour.

CURING / POST-TREATMENT:

Postcuring gives the hardened product the best mechanical and chemical properties and is therefore always recommended; it becomes necessary when the product is working at temperature.



ASSYST sprl / A.S.O.W. sprl
Hellegatstraat 13a - 2590 Berlaar - Belgium
Tel: +32 495 50 61 14 / +32 496 83 70 27
Website: www.assyst.org / www.artsuppliesonweb.com
Email: ao@assyst.org / vera.opsommer@assyst.org

To harden the product, increase the temperature gradually by 10°C every hour until the temperature indicated in the table is reached. Maintain the temperature for the time indicated and then allow to cool slowly. In case of large artefacts, the temperature increase should be slower and more gradual to avoid thermal imbalances between the outer surface and the core. For thin layer applications and composites, post-cure on mould.

BEWARE:

Epoxy paste PE 664 can be stored for more than one year, whereas hardener can be stored for two years in the original sealed container in a cool and dry place. Hardeners are very moisture sensitive. Refer to the product data sheet for health and safety.