### **TECHNICAL DATASHEET**

## Elecolit® 6604



Elecolit® 6604 is a 1 component Epoxy adhesive with outstanding mechanical properties and excellent thermal conductivity. The product shows good flow behaviour and can be used with dispenser or in screen printing processes, it can further be handled comfortably with a coating knife or a spatula.

Shelf life: 6 months at 5℃

### **Technical Data**

| Color<br>Resin<br>Filler              | approx. 4    | white<br>epoxy<br>42% Aluminiumoxid 4µ |
|---------------------------------------|--------------|--|
| UNCURED PROPERTIES                    |              |  |
| Viscosity (Brookfield LVT/25℃) [Pa⋅s] | PE-Norm P001 | 110 to 140                             |
| Flash point [°C]                      | PE-Norm P050 | > 100                                  |
| Density [g/cm <sup>3</sup> ]          | PE-Norm P003 | approx. 1.71                           |
| Curing                                |              |  |
| 20 minutes at 100                     | °C           |  |

| 30 | minutes at | 130 | °C |
|----|------------|-----|----|
| 10 | minutes at | 150 | °C |
| 60 | minutes at | 100 | °C |

### **CURED PROPERTIES**

| Temperature Resistance [°C]   | PE-Norm P030  | -40 to 200 |
|-------------------------------|---------------|------------|
| Hardness [Shore D]            | PE-Norm P052  | 80 to 90   |
| Volume resistivity [Ohm x cm] | ASTM-D-257-93 | 2E+15      |
| Water Absorption [mass-%]     | PE-Norm P053  | < 0.3      |
| Tg [℃] (DSC)                  | PE-Norm P009  | 110 to 120 |
| CTE [ppm/K]                   | PE-Norm P017  | 34.6       |
| Dielectric Constant [10kHz]   | PE-Norm P054  | 0,4        |
| Thermal conductivity [W/m·K]  | ASTM 1530     | 1.05       |
| Dielectric Strength [kV/mm]   | PE-Norm P055  | 18.1       |
|                               |               |            |

Our data sheets have been compiled to the best of our knowledge. The information included in our data sheets is exclusive information for the tended user and describes characteristics, with no declaration of commitment. We recommend trials in order to confirm that our products satisfy the particular application requirements.For an additional technical consultation, please contact our RD department. In general, for guarantee claims, please refer to our standard terms and conditions.

**Adhesives** and more...

Generally the guidelines for application, storage etc. as mentioned in our general data sheet for Elecolit® are valid.

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# panaco adhesives & more

### **Mechanical Data**

Lap Shear Strength (Steel/Steel) [MPa] Lap Shear Strength (Alu/Alu) [MPa]

## Elecolit® 6604

| [PE-Norm P013] | approx. 18 |
|----------------|------------|
| [PE-Norm P013] | approx. 12 |

### Instructions for Use

#### Surface Preparation

The surfaces to be bonded should be free of dust, oil, fat or any other dirt in order to optimise reproducible results. Lightly soiled surfaces can be cleaned with cleaner IP to create a suitable working surface.

**Application** 

Our products are delivered ready for use. As soon as you receive them, you can dispense or use them for screen printing processes. You should store the products at 5° C for longer shelf life time.

Before using acclimate the adhesive up to room temperature. Liquid Elecolit products have to be homogenised well before application. Paste-like products can be used directly.

1-C Products have no mixing ration and pot life time.

Curing

For curing heat must be applied. The polyaddition starts at temperature over 100 °C. Higher temperature will reduce the curing time. For detailed curing information, please look into the technical data sheet.

If help is required, please contact our engineering department. Please read the corresponding **Safety Data Sheet** for this product.

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