

## PLEXIGLAS® Resist zk6HF

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### Product Profile:

PLEXIGLAS® Resist zk6HF is an amorphous, impact-modified thermoplastic molding compound (PMMA-I).

Typical properties of impact-modified PLEXIGLAS® molding compounds are

- high weather resistance
- excellent transmission and clarity
- brilliant appearance
- the pleasant feel and sound of the moldings.

PLEXIGLAS® Resist zk6HF is characterized by the following special properties:

- excellent break resistance and impact strength
- improved resistance to stress cracking
- very good flow.

### Application:

Used for injection molding as well as for extruding sheets and profiles.

### Examples:

applications involving thin walls and long flow paths, thin-walled components; items requiring accurate mold surface reproduction, such as very finely textured luminaire covers.

### Processing:

PLEXIGLAS® Resist zk6HF can be processed on machines with 3-zone general purpose screws for engineering thermoplastics.

### Physical Form / Packaging:

PLEXIGLAS® Resist zk HF molding compounds are supplied as pellets of uniform size in 25 kg polyethylene bags or in 500 kg boxes with PE lining; other packaging on request.

## Properties:

|  | Parameter     | Unit                   | Standard    | PLEXIGLAS® Resist zk6HF |
|--|---------------|------------------------|-------------|-------------------------|
| <b>Mechanical Properties</b>             |               |                        |             |                         |
| Tensile Modulus                          | 1 mm/min      | MPa                    | ISO 527     | 1900                    |
| Yield Stress                             | 50 mm/min     | MPa                    | ISO 527     | 45                      |
| Yield Strain                             | 50 mm/min     | %                      | ISO 527     | 5                       |
| Nominal Strain @ Break                   |               | %                      | ISO 527     | 50                      |
| Charpy Impact Strength                   | 23°C          | kJ/m <sup>2</sup>      | ISO 179/1eU | 75                      |
| <b>Thermal Properties</b>                |               |                        |             |                         |
| Vicat Softening Temperature              | B / 50        | °C                     | ISO 306     | 94                      |
| Coeff. of Linear Therm. Expansion        | 0 – 50°C      | E-5 /°K                | ISO 11359   | 11                      |
| Fire Rating                              |               |                        | DIN 4102    | B2                      |
| Flammability UL 94                       | 1.6 mm        | Class                  | IEC 707     | HB                      |
| <b>Rheological Properties</b>            |               |                        |             |                         |
| Melt Volume Rate, MVR                    | 230°C / 3.8kg | cm <sup>3</sup> /10min | ISO 1133    | 4.2                     |
| <b>Optical Properties</b>                |               |                        |             |                         |
| Luminous transmittance                   | d=3 mm        |                        |             |                         |
|  | D65           | %                      | ISO 13468-2 | 91                      |
| Refractive Index                         |               |                        | ISO 489     | 1.49                    |
| <b>Other Properties</b>                  |               |                        |             |                         |
| Density                                  |               | g/cm <sup>3</sup>      | ISO 1183    | 1.16                    |
| Water Absorption in Water                |               | %                      | ISO 62      | 1.8                     |
| Humidity Absorption                      | 23°C / 50%    | %                      | ISO 62      | 0.5                     |
| <b>Recommended Processing Conditions</b> |               |                        |             |                         |
| Predrying Temperature                    |               | °C                     |             | max. 80                 |
| Predrying Time in Desiccant-Type Drier   |               | h                      |             | 2 – 3                   |
| Melt Temperature                         |               | °C                     |             | 220 – 260               |
| Mold Temperature (Injection Molding)     |               | °C                     |             | 50 – 70                 |

All listed technical data are typical values intended for your guidance. They are given without obligation and do not constitute a materials specification.

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