# ACRYLITE® Resist ZK-F

Polymethyl Methacrylate Acrylic

Evonik Cyro LLC

## Message:

ACRYLITE® Resist ZK-F polymer is an amorphous, impact-modified thermoplastic molding and extrusion compound based on polymethyl methacrylate (PMMA).
Typical properties of ACRYLITE® Resist acrylic polymers are:
high weather resistance
high light transmission
improved resistance to stress cracking
good melt flow rate
easy to color
The special properties of ACRYLITE® Resist ZK-F polymer are:
medium impact/break resistance and strength
high melt flow rate
high heat resistance
FDA food contact use
Application:
Used for injection molded parts.

| General Information | |
|---|---|
| UL YellowCard | E54671-244589 |
| Additive | Impact Modifier |
| Features | Amorphous |
| | Food Contact Acceptable |
| | Good Colorability |
| | Good Flow |
| | Good Strength |
| | Good Weather Resistance |
| | High Clarity |
| | High Heat Resistance |
| | Impact Modified |
| | Medium Impact Resistance |
| Uses | Appliance Components |
| | Household Goods |
| | Housings |
| | Lenses |
| | Lighting Applications |
| | Writing Instruments |
| Agency Ratings | EC 1907/2006 (REACH) |
| | FDA Food Contact, Unspecified Rating |
| Appearance | Clear/Transparent |

| | |
|---|---|
| Forms | Pellets |
| Processing Method | Extrusion |
| | Injection Molding |

| Physical | Nominal Value | Unit | Test Method |
|---|---|---|---|
| Specific Gravity | 1.17 | g/cm³ | ASTM D792 |
| Apparent Density | 0.71 | g/cm³ | ASTM D1895 |
| Melt Mass-Flow Rate (MFR) (230°C/3.8 kg) | 13 | g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow | 0.30 to 0.60 | % | ASTM D955 |
| Water Absorption (Equilibrium) | < 0.30 | % | ASTM D570 |
| **Hardness** | **Nominal Value** | **Unit** | **Test Method** |
| Rockwell Hardness (M-Scale) | 65 | | ASTM D785 |
| **Mechanical** | **Nominal Value** | **Unit** | **Test Method** |
| Tensile Modulus | 2280 | MPa | ASTM D638 |
| Tensile Strength | 56.5 | MPa | ASTM D638 |
| Tensile Elongation | | | ASTM D638 |
| Yield | 5.0 | % | |
| Break | 25 | % | |
| Flexural Modulus | 2000 | MPa | ASTM D790 |
| Flexural Strength | 68.9 | MPa | ASTM D790 |
| **Impact** | **Nominal Value** | **Unit** | **Test Method** |
| Notched Izod Impact | | | ASTM D256 |
| 0°C, 6.35 mm | 24 | J/m | |
| 23°C, 6.35 mm | 40 | J/m | |
| **Thermal** | **Nominal Value** | **Unit** | **Test Method** |
| Deflection Temperature Under Load (1.8 MPa, Annealed, 6.35 mm) | 91.1 | °C | ASTM D648 |
| Vicat Softening Temperature | 97.8 | °C | ASTM D1525 |
| CLTE - Flow (0 to 100°C) | 7.2E-5 | cm/cm/°C | ASTM D696 |
| **Optical** | **Nominal Value** | **Unit** | **Test Method** |
| Transmittance (3200 µm) | 92.0 | % | ASTM D1003 |
| Haze (3200 µm) | 1.0 | % | ASTM D1003 |
| Yellowness Index (3.20 mm) | 0.30 | YI | ASTM D1925 |



Recommended distributors for this material

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China