Product Information

# ACRYLITE® Resist ZK-X polymer

Product Profile:

ACRYLITE® Resist ZK-X 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-X polymer are:
• medium impact/break resistance and strength
• low melt flow rate
• high heat resistance

Application:

Used for injection molded parts and extruded sheet.

Examples:

Wind deflectors, point-of-purchase displays, light covers, fountain pens, appliance housings, appliance lenses and housewares.

Processing:

ACRYLITE® Resist ZK-X polymer can be processed in injection molding machines with 3- zone general purpose screws.

Packaging:

Available in 1500 lb. gaylord boxes; other packaging available on request.

## Properties:

| | Parameter | Unit | ASTM-Standard | ACRYLITE® Resist ZK-X polymer |
|---|---|---|---|---|
| **Mechanical Properties** | | | | Typical Value |
| Tensile Strength | | psi [MPa] | D 638 | 9300 [64.1] |
| Tensile Modulus | | x10⁶ psi [GPa] | D 638 | 0.37 [2.5] |
| Tensile Elongation @ Yield | | % | D 638 | 5 |
| Tensile Elongation @ Break | | % | D 638 | 25 |
| Flexural Strength | | psi [MPa] | D 790 | 15000 [103.4] |
| Flexural Modulus | | x10⁶ psi [GPa] | D 790 | 0.35 [2.5] |
| Notched Izod | ¼" bar @23°C | ft-lb/in [J/m] | D 256 | 0.85 [44.9] |
| Notched Izod | ¼" bar @0°C | ft-lb/in [J/m] | D 256 | 0.60 [31.7] |
| Rockwell Hardness | | M Scale | D 785 | 70 |
| **Thermal Properties** | | | | |
| Vicat Softening Point | 264 psi | °F [°C] | D 1525 | 230 [110] |
| Deflection Temperature, Annealed | 1.8MPa, 0.250" | °F [°C] | D 648 | 200 [93] |
| Coeff. of Linear Therm. Expansion | 32 - 312ºF | in/ in/ºF | D 696 | 0.00004 |
| Coeff. of Linear Therm. Expansion | 0 - 100°C | mm/mm/°C | D 696 | 0.000072 |
| **Rheological Properties** | | | | |
| Melt Flow Rate | 230°C & 3.8 kg | g/10min | D 1238 | 1.0 |
| **Optical Properties** | d = 3.2 mm | | | |
| Light Transmission | | % | D 1003 | 91.5 |
| Haze | | % | D 1003 | 1 |
| Yellowness Index | | | D 1925 | 0.3 |
| **Other Properties** | | | | |
| Specific Gravity | | | D 792 | 1.16 |
| Water Absorption | | % Max | D 570 | 0.3 |
| Mold Shrinkage | | in/in, mm/mm | D 955 | 0.004 - 0.007 |
| Bulk Density | | g/cc | D 1895 | 0.71 |

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



Roehm America LLC • 299 Jefferson Road • Parsippany NJ 07054
www.acrylite-polymers.de
www.roehm.com

Ref. No.: 3561-1008-ACCESSDB A1142-A Date: 02/04/2020