

PRODUCT INFORMATION

ACRYLITE® 8N df22 Molding Compound

Product Profile:

ACRYLITE® Satinice df22 8N, based on ACRYLITE® 8N, is characterized by diffuse scattering of light.

Typical properties of ACRYLITE® molding compound are

- good melt flow rate
- high mechanical strength, surface hardness and mar resistance
- very good weather resistance.

Special properties of ACRYLITE® Satinice df22 8N are

- very good lightdiffusion combined with excellent light transmission.

Application:

Used for injection molding items for lighting engineering applications

Examples:

luminaire covers, projection screens and similar applications

Processing:

ACRYLITE® Satinice df22 8N can be processed on injection molding machines with 3-zone general purpose screws for engineering thermoplastics.

Physical Form / Packaging:

ACRYLITE® Satinice df molding compounds are supplied as pellets of uniform size, packaged in 25kg polyethylene bags; other packaging on request.

Properties:

| | Parameter | Unit | ASTM-Standard | ACRYLITE® 8N df22 Molding Compound |
|--|----------------|----------------------------|---------------|--|
| Mechanical Properties | | | | Typical Value |
| Tensile Strength | | psi [MPa] | D 638 | 11500 [79.3] |
| Tensile Modulus | | x10 ⁶ psi [GPa] | D 638 | 0.55 [3.8] |
| Tensile Elongation @ Yield | | % | D 638 | 4 |
| Tensile Elongation @ Break | | % | D 638 | 4 |
| Flexural Strength | | psi [MPa] | D 790 | 20000 [138] |
| Flexural Modulus | | x10 ⁶ psi [GPa] | D 790 | 0.5 [3.5] |
| Notched Izod | ¼" bar @23°C | ft-lb/in [J/m] | D 256 | 0.3 [16] |
| Rockwell Hardness | | 1 | D 785 | 95 |
| Thermal Properties | | | | |
| Vicat Softening Point | 50N, 50°C/h | °F [°C] | D 1525 | 246 [119] |
| Deflection Temperature, Annealed | 1.8MPa, 0.250" | °F [°C] | D 648 | 221 [105] |
| Coeff. of Linear Therm. Expansion | 32 - 312°F | 1/F | D 696 | 0.00004 |
| Coeff. of Linear Therm. Expansion | 0 - 100°C | 1/C | D 696 | 0.000072 |
| Rheological Properties | | | | |
| Melt Flow Rate | 230°C & 3.8 kg | g/10min | D 1238 | 3.0 |
| Optical Properties | | | | d = 3.2 mm |
| Light Transmission | | % | D 1003 | 88 |
| Haze | | % | D 1003 | 94 |
| Yellowness Index | | | E 313 | <4.5 |
| Other Properties | | | | |
| Specific Gravity | | | D 792 | 1.19 |
| Water Absorption | | % Max | D 570 | 0.3 |
| Mold Shrinkage | | in/in, mm/mm | D 955 | 0.003 - 0.006 |
| Bulk Density | | in/in, mm/mm | D 1895 | 0.66 |
| Recommended Processing Conditions | | | | |
| Predrying Temperature | | F [°C] | | 175 [80] |
| Predrying Time in Desiccant-Type Drier | | h | | 3 – 4 |
| Melt Temperature | | F [°C] | | 464 - 482 [240 - 250] |
| Mold Temperature (Injection Molding) | | F [°C] | | 100 - 175 [38 - 80] |
| Die Temperature (Extrusion) | | F [°C] | | 464 - 482 [240 - 250] |

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

Certified to ISO 9001:2015, ISO 14001:2015 and IATF 16949:2016.

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The logo for RÖHM, featuring the word "RÖHM" in a bold, black, sans-serif font. The letter "O" has a small circle above it, indicating a umlaut.