**Ex-17 ABS**

High-impact extrusion grade

**Typical Material Properties**

|  |  |  |
| --- | --- | --- |
| General |  |  |
| Material Status | Commercial: Active |  |
| Availability | North America |  |
| Features | Good Colorability | Medium Gloss |
|  | High Impact Resistance | Medium Rigidity |
| Processing Method | Coextrusion | Injection Molding |
|  | Profile Extrusion |  |

|  |  |  |
| --- | --- | --- |
| Physical Properties | Nominal Values | Test Method |
| Specific Gravity | 1.04 | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (220°C/10.0 kg) | 4.0 g/10 min |  |
| Molding Shrinkage - Flow | 3.0E-3 to 6.0E-3 in/in | ASTM D955 |
| Water Absorption (Equilibrium) | 0.30% | ASTM D570 |

|  |  |  |
| --- | --- | --- |
| Hardness |  |  |
| Rockwell Hardness (R-Scale) | 99 | ASTM D785 |

|  |  |  |
| --- | --- | --- |
| Mechanical Properties |  |  |
| Tensile Strength (Yield, 0.125 in) | 5800 psi | ASTM D638 |
| Flexural Modulus (0.125 in) | 280000 psi | ASTM D790 |
| Flexural Strength (0.125 in) | 8400 psi | ASTM D790 |

|  |  |  |
| --- | --- | --- |
| Impact |  |  |
| Notched Izod Impact 2 | 9.0 ft·lb/in | ASTM D256 |

|  |  |  |
| --- | --- | --- |
| Thermal |  |  |
| Deflection Temperature Under Load (264 psi, Unannealed, 0.250 in) | 194 °F | ASTM D648 |
| Vicat Softening Temperature | 210 °F | ISO 306 |

|  |  |  |
| --- | --- | --- |
| Flammability |  |  |
| Flame Rating |  | UL 94 |
| 0.0591 in | HB |  |
| 0.118 in | HB |  |

|  |  |
| --- | --- |
| Injection | Nominal Value Unit |
| Drying Temperature | 176 to 185 °F |
| Drying Time | 2.0 to 4.0 hr |
| Suggested Shot Size | 50 to 80 % |
| Rear Temperature | 392 to 428 °F |
| Middle Temperature | 428 to 464 °F |
| Front Temperature | 446 to 482 °F |
| Nozzle Temperature | 446 to 482 °F |
| Processing (Melt) Temp | 482 to 518 °F |
| Mold Temperature | 122 to 176 °F |
| Injection Pressure | 9990 to 12000 psi |
| Back Pressure | 99.9 to 200 psi |
| Screw Speed | 30 to 60 rpm |

|  |
| --- |
| Notes |
| 1These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier. |
| 2120 mil Notch Depth |