

ABS 3450

ABS

Wellman Advanced Materials

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|-------------------------------------|-------|---------|-----------------|
| ISO Data | | | |
| Melt flow index, MFI | 8 | g/10min | ISO 1133 |
| Temperature | 220 | °C | - |
| Load | 10 | kg | - |
| Molding shrinkage, parallel | 0.6 | % | ISO 294-4, 2577 |

| Mechanical properties | Value | Unit | Test Standard |
|---------------------------------------|-------|-------------------|---------------|
| ISO Data | | | |
| Tensile Modulus | 2200 | MPa | ISO 527 |
| Yield stress | 48 | MPa | ISO 527 |
| Yield strain | 3.5 | % | ISO 527 |
| Stress at break | 40 | MPa | ISO 527 |
| Strain at break | 10 | % | ISO 527 |
| Flexural modulus, 23°C | 2300 | MPa | ISO 178 |
| Flexural strength | 72 | MPa | ISO 178 |
| Charpy notched impact strength, +23°C | 14 | kJ/m ² | ISO 179/1eA |
| Charpy notched impact strength, -30°C | 8 | kJ/m ² | ISO 179/1eA |

| Thermal properties | Value | Unit | Test Standard |
|---|-------|-------|----------------|
| ISO Data | | | |
| Temp. of deflection under load, 1.80 MPa | 87 | °C | ISO 75-1/-2 |
| Temp. of deflection under load, 0.45 MPa | 102 | °C | ISO 75-1/-2 |
| Vicat softening temperature, B | 107 | °C | ISO 306 |
| Coeff. of linear therm. expansion, parallel | 80 | E-6/K | ISO 11359-1/-2 |

| Other properties | Value | Unit | Test Standard |
|------------------|-------|-------------------|---------------|
| Density | 1060 | kg/m ³ | ISO 1183 |

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 80 - 90 | °C | - |
| Pre-drying - Time | 2 - 4 | h | - |
| Processing humidity | ≤0.05 | % | - |
| Mold temperature | 50 - 80 | °C | - |
| Zone 1 | 200 - 210 | °C | - |
| Zone 2 | 225 - 235 | °C | - |
| Zone 3 | 230 - 245 | °C | - |
| Nozzle temperature | 220 - 250 | °C | - |
| Screw speed | 30 - 70 | rpm | - |
| Injection pressure | 70 - 110 | MPa | - |
| Back pressure | 0.3 - 0.7 | MPa | - |

Characteristics**Processing**

Injection Molding

Regional Availability

North America