

GRADE: ABS 33

Molding Grade ABS

Typical Material Properties

| Physical | Nominal Values | ASTM Test |
|--------------------------------------|-------------------|-----------|
| Specific Gravity | 1.05 | D792 |
| Melt Flow (230°C/3.8 kg) | 4.5 g/10 min | D1238 |
| Mechanical | | |
| Tensile Modulus | 300,000 psi | D638 |
| Tensile Strength @ Yield | 5,500 psi | D638 |
| Flexural Modulus | 300,000 psi | D790 |
| Flexural Strength @ Yield | 9,500 psi | D790 |
| Impact | | |
| Notched Izod Impact (73°F, 0.125 in) | 3.0 ft-lb/in | D256 |
| Thermal | | |
| HDT @ 264 PSI – unannealed (0.125) | 180°F | D648 |
| Mold Shrinkage | | |
| Linear Flow | .004 – .008 in/in | D955 |

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Recommended Processing Guidelines

| | Nominal Values |
|-------------------------------|------------------------------|
| Drying Time and Temperature | 3.0 – 4.0 hrs, 180°F – 200°F |
| Suggested Max Moisture | 0.15% |
| Rear Temperature | 370°F – 425°F |
| Middle Temperature | 400°F – 450°F |
| Front Temperature | 425°F – 475°F |
| Nozzle Temperature | 425°F – 525°F |
| Processing (Melt) Temperature | 425°F – 525°F |
| Mold Temperature | 120°F – 170°F |
| Back Pressure | 25 – 100 psi |
| Screw Speed | 25 – 75 RPM |

The conditions listed above are only guidelines. You may want to adjust conditions to meet your requirements.