

Product Texts

Novodur® ECO H605 MR30 is a high heat injection molding grade with enhanced flowability and low emission, i.e. suitable to produce parts which fulfill interior emission requirements of the automotive OEMs. The product contains 30% post-consumer mechanically recycled ABS and has received RecyClass certification.

Carbon Footprint Reduction vs Fossil-Based (3rd party validated): 20 % (ISO 14044)

Post-Consumer Recycled ABS Content (RecyClass-certified): 30 %

| Processing/Physical Characteristics | Value | Unit | Test Standard |
|---|-------|------------------------|-----------------|
| ISO Data | | | |
| ^[C] Melt volume-flow rate, MVR | 19 | cm ³ /10min | ISO 1133 |
| Temperature | 220 | °C | - |
| Load | 10 | kg | - |
| Molding shrinkage, parallel | 0.5 | % | ISO 294-4, 2577 |

[C]: CAMPUS

| Mechanical properties | Value | Unit | Test Standard |
|--|-------|-------------------|---------------|
| ISO Data | | | |
| ^[C] Tensile Modulus | 2700 | MPa | ISO 527 |
| ^[C] Yield stress | 46 | MPa | ISO 527 |
| ^[C] Yield strain | 2.4 | % | ISO 527 |
| ^[C] Nominal strain at break | 14 | % | ISO 527 |
| Flexural modulus, 23°C | 2600 | MPa | ISO 178 |
| Flexural strength | 75 | MPa | ISO 178 |
| ^[C] Charpy impact strength, +23°C | 60 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy impact strength, -30°C | 50 | kJ/m ² | ISO 179/1eU |
| ^[C] Charpy notched impact strength, +23°C | 13 | kJ/m ² | ISO 179/1eA |
| ^[C] Charpy notched impact strength, -30°C | 7 | kJ/m ² | ISO 179/1eA |
| Ball indentation hardness | 116 | MPa | ISO 2039-1 |

[C]: CAMPUS

| Thermal properties | Value | Unit | Test Standard |
|---|-------|------|---------------|
| ISO Data | | | |
| ^[C] Temp. of deflection under load, 1.80 MPa | 99 | °C | ISO 75-1/-2 |
| ^[C] Temp. of deflection under load, 0.45 MPa | 102 | °C | ISO 75-1/-2 |
| ^[C] Vicat softening temperature, B | 102 | °C | ISO 306 |

[C]: CAMPUS

| Other properties | Value | Unit | Test Standard |
|---------------------------------|-------|-------------------|----------------|
| ^[C] Water absorption | 1.03 | % | Sim. to ISO 62 |
| ^[C] Density | 1050 | kg/m ³ | ISO 1183 |
| Recycled resin content | 30 | % | - |
| Bulk density | 600 | kg/m ³ | - |

[C]: CAMPUS

| Processing Recommendation Injection Molding | Value | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature | 80 | °C | - |
| Pre-drying - Time | 2 - 4 | h | - |
| Melt temperature | 230 - 260 | °C | - |
| Mold temperature | 60 - 80 | °C | - |

Characteristics**Processing**

Injection Molding

Certifications

Recycled Resin Content, Post-Consumer Recyclate

Delivery form

Pellets

Applications

Automotive, Electrical and Electronical

Special Characteristics

Heat stabilized or stable to heat

Regional Availability

North America, Europe, Asia Pacific, South and Central America, Near East/Africa

Features

High Gloss, Low Emission

Other text information

Injection molding

PREPROCESSING

Pre-drying, Temperature: 80°C

Pre-drying, Time: 2 - 4h

PROCESSING

Melt temperature, range: 230 - 260°C

Mold temperature, range: 60 - 80°C