

ULTEM™ RESIN AUT200M

REGION EUROPE

DESCRIPTION

High flow Polyetherimide (Tg 217C) with internal mold release.. Very low outgassing and plateau, for automotive lighting applications where highly metallized, reflective surfaces are required. Haze onset temperature of 204C (SABIC IP method).

| INDUSTRY | SUB INDUSTRY |
|------------|---------------------------|
| Automotive | Automotive Under the Hood |

TYPICAL PROPERTY VALUES

Revision 20230607

| PROPERTIES | TYPICAL VALUES | UNITS | TEST METHODS |
|---|----------------|-------------------------|--------------|
| MECHANICAL | | | |
| Taber Abrasion, CS-17, 1 kg | 10 | mg/1000cy | SABIC method |
| Tensile Stress, yield, 50 mm/min | 105 | MPa | ISO 527 |
| Tensile Stress, break, 50 mm/min | 85 | MPa | ISO 527 |
| Tensile Strain, yield, 50 mm/min | 6 | % | ISO 527 |
| Tensile Strain, break, 50 mm/min | 60 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 3300 | MPa | ISO 527 |
| Flexural Stress, yield, 2 mm/min | 160 | MPa | ISO 178 |
| Flexural Modulus, 2 mm/min | 3300 | MPa | ISO 178 |
| Ball Indentation Hardness, H358/30 | 140 | MPa | ISO 2039-1 |
| IMPACT | | | |
| Izod Impact, unnotched 80*10*4 +23°C | NB | kJ/m ² | ISO 180/1U |
| Izod Impact, unnotched 80*10*4 -30°C | NB | kJ/m ² | ISO 180/1U |
| Izod Impact, notched 80*10*4 +23°C | 5 | kJ/m ² | ISO 180/1A |
| Izod Impact, notched 80*10*4 -30°C | 5 | kJ/m ² | ISO 180/1A |
| THERMAL | | | |
| Thermal Conductivity | 0.24 | W/m·°C | ISO 8302 |
| CTE, 23°C to 150°C, flow | 5.E-05 | 1/°C | ISO 11359-2 |
| CTE, 23°C to 150°C, xflow | 5.E-05 | 1/°C | ISO 11359-2 |
| Vicat Softening Temp, Rate A/50 | 215 | °C | ISO 306 |
| Vicat Softening Temp, Rate B/50 | 211 | °C | ISO 306 |
| Vicat Softening Temp, Rate B/120 | 212 | °C | ISO 306 |
| HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm | 195 | °C | ISO 75/Be |
| HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm | 190 | °C | ISO 75/Ae |
| Metallized Haze Onset | 204 | °C | SABIC method |
| PHYSICAL | | | |
| Mold Shrinkage on Tensile Bar, flow | 0.5 – 0.7 | % | SABIC method |
| Density | 1.27 | g/cm ³ | ISO 1183 |
| Water Absorption, (23°C/saturated) | 1.25 | % | ISO 62-1 |
| Moisture Absorption (23°C / 50% RH) | 0.7 | % | ISO 62 |
| Melt Volume Rate, MVR at 340°C/5.0 kg | 13 | cm ³ /10 min | ISO 1133 |

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|-----------------------------|----------------|-------|--------------|
| INJECTION MOLDING | | | |
| Drying Temperature | 150 | °C | |
| Drying Time | 4 – 6 | Hrs | |
| Maximum Moisture Content | 0.02 | % | |
| Melt Temperature | 370 – 410 | °C | |
| Nozzle Temperature | 350 – 405 | °C | |
| Front - Zone 3 Temperature | 360 – 415 | °C | |
| Middle - Zone 2 Temperature | 350 – 405 | °C | |
| Rear - Zone 1 Temperature | 340 – 395 | °C | |
| Hopper Temperature | 80 – 120 | °C | |
| Mold Temperature | 140 – 180 | °C | |

ADDITIONAL PRODUCT NOTES

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

MORE INFORMATION

For curve data and CAE cards, please visit and register at <https://materialfinder.sabic-specialties.com>

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