

# ULTEM™ RESIN ATX200F

REGION AMERICAS

## DESCRIPTION

High flow Polyetherimide blend, ECO Conforming, UL94 V0 Listing, US FDA Food Contact compliant.

| INDUSTRY                   | SUB INDUSTRY                                                                                                                                                          |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Automotive                 | Heavy Truck, Automotive Under the Hood, Aerospace, Motorcycle, Recreational/Specialty Vehicles                                                                        |
| Building and Construction  | Building Component, Water Management                                                                                                                                  |
| Consumer                   | Consumer Goods, Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance, Furniture                                                                   |
| Electrical and Electronics | Energy Management, Drone Solutions, Mobile Phone - Computer - Tablets, Circuit Boards/Additives, Lighting, Printer Copier, Speaker - Earphone, Wireless Communication |
| Hygiene and Healthcare     | Personal and Professional Hygiene, Pharmaceutical Packaging and Drug Delivery, Surgical devices, General Healthcare, Patient Testing                                  |
| Industrial                 | Electrical, Material Handling, Textile, Eyewear                                                                                                                       |
| Mass Transportation        | Rail                                                                                                                                                                  |
| Packaging                  | Industrial Packaging                                                                                                                                                  |

## TYPICAL PROPERTY VALUES

Revision 20231109

| PROPERTIES                                          | TYPICAL VALUES                 | UNITS    | TEST METHODS |
|-----------------------------------------------------|--------------------------------|----------|--------------|
| <b>MECHANICAL</b>                                   |                                |          |              |
| Tensile Stress, yld, Type I, 5 mm/min               | 96                             | MPa      | ASTM D638    |
| Tensile Strain, brk, Type I, 5 mm/min               | 70                             | %        | ASTM D638    |
| Flexural Stress, yld, 2.6 mm/min, 100 mm span       | 144                            | MPa      | ASTM D790    |
| Flexural Modulus, 2.6 mm/min, 100 mm span           | 3170                           | MPa      | ASTM D790    |
| <b>IMPACT</b>                                       |                                |          |              |
| Izod Impact, unnotched, 23°C                        | 2082                           | J/m      | ASTM D4812   |
| Izod Impact, notched, 23°C                          | 53                             | J/m      | ASTM D256    |
| Izod Impact, Reverse Notched, 3.2 mm                | 2670                           | J/m      | ASTM D256    |
| <b>THERMAL</b>                                      |                                |          |              |
| HDT, 1.82 MPa, 6.4 mm, unannealed                   | 190                            | °C       | ASTM D648    |
| Relative Temp Index, Elec <sup>(1)</sup>            | 115                            | °C       | UL 746B      |
| Relative Temp Index, Mech w/impact <sup>(1)</sup>   | 115                            | °C       | UL 746B      |
| Relative Temp Index, Mech w/o impact <sup>(1)</sup> | 115                            | °C       | UL 746B      |
| <b>PHYSICAL</b>                                     |                                |          |              |
| Specific Gravity                                    | 1.26                           | -        | ASTM D792    |
| Mold Shrinkage, flow, 3.2 mm                        | 0.5 – 0.7                      | %        | SABIC method |
| Melt Flow Rate, 337°C/6.6 kgf                       | 24                             | g/10 min | ASTM D1238   |
| <b>ELECTRICAL</b>                                   |                                |          |              |
| Comparative Tracking Index (UL) {PLC}               | 4                              | PLC Code | UL 746A      |
| Hot-Wire Ignition (HWI), PLC 0                      | ≥0.75                          | mm       | UL 746A      |
| High Amp Arc Ignition (HAI), PLC 4                  | ≥0.75                          | mm       | UL 746A      |
| <b>FLAME CHARACTERISTICS <sup>(1)</sup></b>         |                                |          |              |
| UL Yellow Card Link                                 | <a href="#">E121562-221073</a> | -        | -            |

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CHEMISTRY THAT MATTERS™

| PROPERTIES                              | TYPICAL VALUES | UNITS | TEST METHODS |
|-----------------------------------------|----------------|-------|--------------|
| UL Recognized, 94V-0 Flame Class Rating | ≥1.5           | mm    | UL 94        |
| UL Recognized, 94V-2 Flame Class Rating | ≥0.75          | mm    | UL 94        |
| INJECTION MOLDING                       |                |       |              |
| Drying Temperature                      | 135            | °C    |              |
| Drying Time                             | 4 – 6          | Hrs   |              |
| Drying Time (Cumulative)                | 10             | Hrs   |              |
| Maximum Moisture Content                | 0.02           | %     |              |
| Melt Temperature                        | 350 – 370      | °C    |              |
| Nozzle Temperature                      | 350 – 370      | °C    |              |
| Front - Zone 3 Temperature              | 350 – 370      | °C    |              |
| Middle - Zone 2 Temperature             | 345 – 365      | °C    |              |
| Rear - Zone 1 Temperature               | 340 – 360      | °C    |              |
| Mold Temperature                        | 135 – 165      | °C    |              |
| Back Pressure                           | 0.3 – 0.7      | MPa   |              |
| Screw Speed                             | 40 – 70        | rpm   |              |
| Shot to Cylinder Size                   | 40 – 60        | %     |              |
| Vent Depth                              | 0.025 – 0.076  | mm    |              |

(1) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

## 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.

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