

Technical Data Sheet

Centrex ASA 825A 90249 UVWHI



Acrylonitrile Styrene Acrylate

Product Description

Centrex ASA 825A 90249 UVWHI is a Acrylonitrile Styrene Acrylate material and is typically used in Extrusion, Sheet Extrusion, Thermoforming applications. Features include: Good Melt Strength, Good Weather Resistance, High Gloss, High Impact Resistance, and UV Resistant.

| | |
|--------------------------|---|
| Processing Method | Extrusion; Sheet Extrusion |
| Attribute | Good Melt Strength; Good Weather Resistance; High Gloss; High Impact Resistance; UV Resistant |
| Forms | Pellets |
| Application | Marine Applications; Outdoor Applications; Sheet; Spas; Water Sports Equipment |

| Typical Properties | Nominal Value | Units | Test Method |
|--|---------------|-------------------|-------------|
| Physical | | | |
| Melt Flow Rate | | | |
| (230 °C/3.8 kg) | 3.0 | g/10 min | ASTM D1238 |
| (220 °C/10.0 kg) | 12 | g/10 min | ASTM D1238 |
| Density - Specific Gravity | 1.05 | g/cm ³ | ASTM D792 |
| Mechanical | | | |
| Tensile Elongation at Yield | 2.7 | % | ASTM D638 |
| Tensile Strength at Yield, (5.1 mm/min) | 44.1 | MPa | ASTM D638 |
| Flexural Modulus, (1.3 mm/min, Tangent) | 2100 | MPa | ASTM D790 |
| Tensile Modulus, (5.1 mm/min) | 2280 | MPa | ASTM D638 |
| Flexural Strength, (1.3 mm/min) | 48.3 | MPa | ASTM D790 |
| Impact | | | |
| Notched Izod Impact | | | |
| (23 °C, 3.18 mm) | 210 | J/m | ASTM D256 |
| (-30 °C, 3.18 mm) | 91 | J/m | ASTM D256 |
| (-18 °C, 3.18 mm) | 110 | J/m | ASTM D256 |
| Thermal | | | |
| Deflection Temperature Under Load Unannealed (264 psi), (3.18 mm) | 77.7 | °C | ASTM D648 |
| Coefficient of Linear Thermal Expansion (CLTE), Flow, (-40 to 40 °C) | 8.1E-5 | cm/cm/°C | ASTM D696 |
| Coefficient of Linear Thermal Expansion (CLTE), Perpendicular, (-40 to 4 °C) | 1.1E-4 | cm/cm/°C | ASTM D696 |

| | | |
|--|-----------|------------|
| RTI Elec | | |
| (1.5 mm) | 50.0 °C | UL 746B |
| (3.0 mm) | 50.0 °C | UL 746B |
| (0.75 mm) | 50.0 °C | UL 746B |
| RTI Imp | | |
| (1.5 mm) | 50.0 °C | UL 746B |
| (3.0 mm) | 50.0 °C | UL 746B |
| (0.75 mm) | 50.0 °C | UL 746B |
| RTI Str | | |
| (1.5 mm) | 50.0 °C | UL 746B |
| (3.0 mm) | 50.0 °C | UL 746B |
| (0.75 mm) | 50.0 °C | UL 746B |
| Flammable | | |
| Hot-wire Ignition (HWI) | | UL 746A |
| Optical | | |
| Gloss, (60°, Untextured, High Gloss Surface) | 90 to 100 | ASTM D2457 |
| UL Information | | |
| Flame Rating | | |
| (1.5 mm) | HB | UL 94 |
| (3.0 mm) | HB | UL 94 |
| (0.75 mm) | HB | UL 94 |
| UL File Number | E51193 | |
| Outdoor Suitability | | UL 746C |

| Extrusion Parameters | Nominal Value | Units |
|-----------------------------|----------------------|--------------|
| Drying Time | 3.0 to 4.0 | hr |
| Suggested Max Moisture | <0.020 | % |
| Suggested Max Re grind | 40 | % |
| Drying Temperature | 82 to 93 | °C |