DIAMALOY ENGINEERED ALLOYS ABS NYLON 4010A

Acrylonitrile Butadiene Styrene + Nylon

Network Polymers, Inc.

Message:

DIAMALOY ENGINEERED ALLOYS ABS NYLON 4010A is an Acrylonitrile Butadiene Styrene + Nylon (ABS+Nylon) product. It can be processed by injection molding and is available in North America. Characteristics include: REACH Compliant ROHS Compliant WEEE Compliant Good Weather Resistance

| General Information | | | |
|--------------------------------------------------------------------------------------------|-------------------------|----------|-------------|
| Features | Good Weather Resistance | | |
| Agency Ratings | EC 1907/2006 (REACH) | | |
| | EU 2002/96/EC (WEEE) | | |
| | | | |
| RoHS Compliance | RoHS Compliant | | |
| Forms | Pellets | | |
| Processing Method | Injection Molding | | |
| Physical | Nominal Value | Unit | Test Method |
| Specific Gravity | 1.09 | g/cm³ | ASTM D792 |
| Melt Mass-Flow Rate (MFR) ¹ (265°C/5.0 | | | |
| kg) | 37 | g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow (23°C, 3.18 mm, Injection Molded) | 0.50 to 0.70 | % | ASTM D955 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Strength | | | ASTM D638 |
| Yield, 23°C, 3.18 mm, Injection Molded | 42.2 | MPa | |
| Yield, 23°C, 3.18 mm, Injection Molded | 43.6 | MPa | |
| Break, 23°C, 3.18 mm, Injection Molded | 35.9 | MPa | |
| Break, 23°C, 3.18 mm, Injection Molded | 39.4 | MPa | |
| Tensile Elongation ² | | | ASTM D638 |
| Yield, 23°C, 3.18 mm, Injection Molded ³ | 3.7 | % | |
| Yield, 23°C, 3.18 mm, Injection Molded ⁴ | 3.6 | % | |
| Break, 23°C, 3.18 mm, Injection Molded 5 | 15 | % | |
| Break, 23°C, 3.18 mm, Injection Molded | 200 | % | |
| Flexural Modulus - Tangent ⁷ (23°C, 3.18 mm, Injection Molded, 50.8 mm Span) | 1480 | MPa | ASTM D790B |

| Impact | Nominal Value | Unit | Test Method |
|-------------------------------------------------------------------------------|----------------------------------------|------|-------------------------|
| Notched lzod Impact (23°C, 3.18 mm, Injection Molded) | No Break | | ASTM D256A |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.18 mm, Injection | | | |
| Molded) | 52.8 | °C | ASTM D648 |
| Vicat Softening Temperature | 143 | °C | ASTM D1525 ⁸ |
| Injection | Nominal Value | Unit | |
| Drying Temperature | 80.0 to 85.0 | °C | |
| Drying Time | 4.0 to 6.0 | hr | |
| Suggested Max Moisture | 0.10 | % | |
| Suggested Shot Size | 40 to 70 | % | |
| Suggested Max Regrind | 25 | % | |
| Rear Temperature | 230 to 260 | °C | |
| Middle Temperature | 232 to 260 | °C | |
| Front Temperature | 235 to 260 | °C | |
| Nozzle Temperature | 220 to 260 | °C | |
| Processing (Melt) Temp | 220 to 260 | °C | |
| Mold Temperature | 71.1 to 82.2 | °C | |
| Injection Rate | Fast | | |
| Back Pressure | 0.517 to 1.03 | MPa | |
| NOTE | | | |
| 1. | Procedure A | | |
| 2. | 51 mm/min | | |
| 3. | double gate | | |
| 4. | single gate | | |
| 5. | double gate | | |
| 6. | single gate | | |
| 7. | Method I (3 point load), 1.3 mm/min | | |
| 8. | Rate B (120°C/h), Loading 1 (10 N) | | |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519 Phone: +86 13424755533 Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

