LNP™ LUBRICOMP™ RA004 compound

Polyamide 66

SABIC Innovative Plastics

Message:

LNP LUBRICOMP* RA004 is a compound based on Nylon 66 resin containing Aramid. Added features of this material include: Internally Lubricated. Also known as: LNP* LUBRICOMP* Compound RA-1004

Product reorder name: RA004

| Filler / Reinforcement Aramid fiber Additive Lubricant Features Lubrication Processing Method Injection moding Physical Nominal Value Unit Test Method Specific Gravity ASTM D792 ASTM D792 Moding Shrinkage Formation % ASTM D955 Flow: 24 hours 1.5 % ASTM D955 Mechanical Nominal Value Unit Test Method Transverse flow: 24 hours 2.0 % ASTM D955 Mechanical Nominal Value Unit Test Method Tensile Strength (Break) 8.8.3 MPa ASTM D638 Flexural Modulus 4.5 % ASTM D638 Flexural Modulus 410 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 32 J/m ASTM D648 Unnotched Izod Impact (23°C) 37 C ASTM D648 Polying Temperature 8.2 C < | General Information | | | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-------------------|-------|-------------|
| Features Lubrication Processing Method Injection molding Physical Nominal Value Unit Test Method Specific Gravity 1.23 g/cm³ ASTM D95 Molding Shrinkage | Filler / Reinforcement | Aramid fiber | | |
| Processing Method Injection molding Physical Nominal Value Unit Test Method Specific Gravity 1.23 g/cm³ ASTM D792 Molding Shrinkage | Additive | Lubricant | | |
| Physical Nominal Value Unit Test Method Specific Gravity 1.23 g/cm³ ASTM D792 Molding Shrinkage | Features | Lubrication | | |
| Specific Gravity 1.23 g/cm³ ASTM D792 Molding Shrinkage | Processing Method | Injection molding | | |
| Molding Shrinkage ASTM D955 Flow: 24 hours 1.5 % ASTM D955 Transverse flow: 24 hours 2.0 % ASTM D955 Mechanical Nominal Value Unit Test Method Mechanical Nominal Value Unit Test Method Tensile Strength (Break) 4.5 % ASTM D638 Flexural Modulus 4410 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 32 J/m ASTM D648 Unnotched Izod Impact (23°C) 370 J/m ASTM D648 Injection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit Test Method Drying Temperature 82.2 °C ASTM D648 Injection Nominal Value Unit Test Method Drying Time 4.0 hr Test Method Suggested Max Moisture 4.0 hr Test Method S | Physical | Nominal Value | Unit | Test Method |
| Flow: 24 hours 1.5 % ASTM D955 Transverse flow: 24 hours 2.0 % ASTM D955 Mechanical Nominal Value Unit Test Method Tensile Strength (Break) 88.3 MPa ASTM D638 Tensile Elongation (Break) 4.5 % ASTM D638 Flexural Modulus 4410 MPa ASTM D790 Flexural Strength 138 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 32 J/m ASTM D256 Unnotched Izod Impact (23°C) 370 J/m ASTM D4812 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit Drying Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Suggested Max Moisture 4.0 hr Suggested Max Moisture 266 - 277 °C Middle Temperature 282 - 293 °C Front Temperature 293 - 304 °C Front Temperature 293 - 304 °C Hold Temperature 229 - 33 °C Mold Temperature 222 - 93.3 °C Mold Temperature 0.172 - 0.344 MPa MPa | Specific Gravity | 1.23 | g/cm³ | ASTM D792 |
| Transverse flow: 24 hours 2.0 % ASTM D955 Mechanical Nominal Value Unit Test Method Tensile Strength (Break) 88.3 MPa ASTM D638 Tensile Elongation (Break) 4.5 % ASTM D638 Flexural Modulus 4410 MPa ASTM D790 Impact Nominal Value Unit Test Method Impact (23°C) 32 J/m ASTM D256 Unnotched Izod Impact (23°C) 370 J/m ASTM D4812 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit Unit Test Method Drying Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit Unit Test Method Drying Temperature 4.0 °C ASTM D648 Suggested Max Moisture 266 - 277 °C C | Molding Shrinkage | | | ASTM D955 |
| Mechanical Nominal Value Unit Test Method Tensile Strength (Break) 88.3 MPa ASTM D638 Tensile Elongation (Break) 4.5 % ASTM D638 Flexural Modulus 4410 MPa ASTM D790 Flexural Strength 138 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 32 J/m ASTM D256 Unnotched Izod Impact (23°C) 370 J/m ASTM D4812 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit Drying Temperature 82.2 °C Drying Time 4.0 hr Suggested Max Moisture 0.15 - 0.25 % Rear Temperature 266 - 277 °C Middle Temperature 293 - 304 °C Front Temperature 293 - 304 °C Mold T | Flow: 24 hours | 1.5 | % | ASTM D955 |
| Tensile Strength (Break) 88.3 MPa ASTM D638 Tensile Elongation (Break) 4.5 % ASTM D638 Flexural Modulus 4410 MPa ASTM D790 Flexural Strength 138 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 370 J/m ASTM D4812 Thermal Nominal Value Unit Test Method Poffection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit SATM D648 Injection Nominal Value Unit S | Transverse flow: 24 hours | 2.0 | % | ASTM D955 |
| Final Elongation (Break) 4.5 % ASTM D638 Flexural Modulus 4410 MPa ASTM D790 Flexural Strength 138 MPa ASTM D790 Impact Nominal Value Unit Test Method Nothed Izod Impact (23°C) 32 J/m ASTM D256 Unnotched Izod Impact (23°C) 370 J/m ASTM D4812 Thermal Nominal Value Unit Test Method Programma Parture Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit Test Method Drying Temperature 8.2.2 °C Test Method Suggested Max Moisture 8.2.2 °C Test Method Rear Temperature 0.15 - 0.25 % Test Method Rear Temperature 266 - 277 °C Test Method Front Temperature 293 - 304 °C Test Method Mold Temperature 293 - 304 °C Test Method Mold Temperature 22 - 93.3 °C </td <td>Mechanical</td> <td>Nominal Value</td> <td>Unit</td> <td>Test Method</td> | Mechanical | Nominal Value | Unit | Test Method |
| Flexural Modulus 4410 MPa ASTM D790 Flexural Strength 138 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 32 J/m ASTM D256 Unnotched Izod Impact (23°C) 370 J/m ASTM D4812 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit Drying Temperature 82.2 °C Drying Time 4.0 hr Suggested Max Moisture 0.15 · 0.25 % Rear Temperature 266 · 277 °C Middle Temperature 293 · 304 °C Front Temperature 293 · 304 °C Processing (Melt) Temp 277 · 288 °C Mold Temperature 82.2 · 93.3 °C Mold Temperature 0.172 · 0.344 MPa | Tensile Strength (Break) | 88.3 | MPa | ASTM D638 |
| Flexural Strength 138 MPa ASTM D790 Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 32 J/m ASTM D256 Unnotched Izod Impact (23°C) 370 J/m ASTM D4812 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit SATM D648 Drying Temperature 82.2 °C Drying Time 4.0 hr Suggested Max Moisture 0.15 - 0.25 % Rear Temperature 266 - 277 °C Middle Temperature 282 - 293 °C Front Temperature 293 - 304 °C Processing (Melt) Temp 277 - 288 °C Mold Temperature 82.2 - 93.3 °C Mold Temperature 0.172 - 0.344 MPa | Tensile Elongation (Break) | 4.5 | % | ASTM D638 |
| Impact Nominal Value Unit Test Method Notched Izod Impact (23°C) 32 J/m ASTM D256 Unnotched Izod Impact (23°C) 370 J/m ASTM D4812 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit Test Method Drying Temperature 82.2 °C Drying Time 4.0 hr Suggested Max Moisture 0.15 - 0.25 % Rear Temperature 266 - 277 °C Middle Temperature 282 - 293 °C Front Temperature 293 - 304 °C Processing (Melt) Temp 277 - 288 °C Mold Temperature 82.2 - 93.3 °C Mold Temperature 82.2 - 93.3 °C | Flexural Modulus | 4410 | MPa | ASTM D790 |
| Notched Izod Impact (23°C) 32 J/m ASTM D256 Unnotched Izod Impact (23°C) 370 J/m ASTM D4812 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit *** Drying Temperature 82.2 °C *** Drying Time 4.0 hr *** Suggested Max Moisture 0.15 - 0.25 % *** Rear Temperature 282 - 293 °C *** Middle Temperature 293 - 304 °C *** Processing (Melt) Temp 277 - 288 °C *** Mold Temperature 82.2 - 93.3 °C *** Mold Temperature 82.2 - 93.3 °C *** | Flexural Strength | 138 | MPa | ASTM D790 |
| Unnotched Izod Impact (23°C) 370 J/m ASTM D4812 Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit Unit Drying Temperature 82.2 °C Drying Time 4.0 hr Suggested Max Moisture 015 - 0.25 % Rear Temperature 266 - 277 °C Middle Temperature 293 - 304 °C Processing (Melt) Temp 277 - 288 °C Mold Temperature 82.2 - 93.3 °C Mold Temperature 82.2 - 93.3 °C Mold Temperature 0172 - 0.344 MPa | Impact | Nominal Value | Unit | Test Method |
| Thermal Nominal Value Unit Test Method Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit Unit Unit Unit Unit Unit Unit Unit | Notched Izod Impact (23°C) | 32 | J/m | ASTM D256 |
| Deflection Temperature Under Load (1.8 MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit Drying Temperature 82.2 °C Drying Time 4.0 hr Suggested Max Moisture 0.15 - 0.25 % Rear Temperature 266 - 277 °C Middle Temperature 282 - 293 °C Front Temperature 293 - 304 °C Processing (Melt) Temp 277 - 288 °C Mold Temperature 82.2 - 93.3 °C Mold Temperature 0.172 - 0.344 MPa | Unnotched Izod Impact (23°C) | 370 | J/m | ASTM D4812 |
| MPa, Unannealed, 3.20 mm) 171 °C ASTM D648 Injection Nominal Value Unit Drying Temperature 82.2 °C Drying Time 4.0 hr Suggested Max Moisture 0.15 - 0.25 % Rear Temperature 266 - 277 °C Middle Temperature 282 - 293 °C Front Temperature 293 - 304 °C Processing (Melt) Temp 277 - 288 °C Mold Temperature 82.2 - 93.3 °C Back Pressure 0.172 - 0.344 MPa | Thermal | Nominal Value | Unit | Test Method |
| Drying Temperature 82.2 °C Drying Time 4.0 hr Suggested Max Moisture 0.15 - 0.25 % Rear Temperature 266 - 277 °C Middle Temperature 282 - 293 °C Front Temperature 293 - 304 °C Processing (Melt) Temp 277 - 288 °C Mold Temperature 82.2 - 93.3 °C Back Pressure 0.172 - 0.344 MPa | • | 171 | °C | ASTM D648 |
| Drying Time 4.0 hr Suggested Max Moisture 0.15 - 0.25 % Rear Temperature 266 - 277 °C Middle Temperature 282 - 293 °C Front Temperature 293 - 304 °C Processing (Melt) Temp 277 - 288 °C Mold Temperature 82.2 - 93.3 °C Back Pressure 0.172 - 0.344 MPa | Injection | Nominal Value | Unit | |
| Suggested Max Moisture 0.15 - 0.25 % Rear Temperature 266 - 277 °C Middle Temperature 282 - 293 °C Front Temperature 293 - 304 °C Processing (Melt) Temp 277 - 288 °C Mold Temperature 82.2 - 93.3 °C Back Pressure 0.172 - 0.344 MPa | Drying Temperature | 82.2 | °C | |
| Rear Temperature 266 - 277 °C Middle Temperature 282 - 293 °C Front Temperature 293 - 304 °C Processing (Melt) Temp 277 - 288 °C Mold Temperature 82.2 - 93.3 °C Back Pressure 0.172 - 0.344 MPa | Drying Time | 4.0 | hr | |
| Middle Temperature 282 - 293 °C Front Temperature 293 - 304 °C Processing (Melt) Temp 277 - 288 °C Mold Temperature 82.2 - 93.3 °C Back Pressure 0.172 - 0.344 MPa | Suggested Max Moisture | 0.15 - 0.25 | % | |
| Front Temperature 293 - 304 °C Processing (Melt) Temp 277 - 288 °C Mold Temperature 82.2 - 93.3 °C Back Pressure 0.172 - 0.344 MPa | Rear Temperature | 266 - 277 | °C | |
| Processing (Melt) Temp 277 - 288 °C Mold Temperature 82.2 - 93.3 °C Back Pressure 0.172 - 0.344 MPa | Middle Temperature | 282 - 293 | °C | |
| Mold Temperature 82.2 - 93.3 °C Back Pressure 0.172 - 0.344 MPa | Front Temperature | 293 - 304 | °C | |
| Back Pressure 0.172 - 0.344 MPa | Processing (Melt) Temp | 277 - 288 | °C | |
| | Mold Temperature | 82.2 - 93.3 | °C | |
| Screw Speed 30 - 60 rpm | Back Pressure | 0.172 - 0.344 | MPa | |
| | Screw Speed | 30 - 60 | rpm | |

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

