

# LNPT<sup>™</sup> VERTON<sup>™</sup> COMPOUND RV007ES

RF-7007 EM HS

## DESCRIPTION

LNP VERTON RV007ES is a compound based on Polyamide 66 (Nylon 66) resin containing 35% long glass fiber. Added features include Easy Molding, Heat Stabilized and Structural.

### GENERAL INFORMATION

|                       |                                                                                            |
|-----------------------|--------------------------------------------------------------------------------------------|
| Features              | Good Processability, Heat Stabilized, High stiffness/Strength, No PFAS intentionally added |
| Fillers               | Glass Fiber                                                                                |
| Polymer Types         | Polyamide 66 (Nylon 66)                                                                    |
| Processing Techniques | Injection Molding                                                                          |

## TYPICAL PROPERTY VALUES

Revision 20231127

| PROPERTIES                                          | TYPICAL VALUES | UNITS             | TEST METHODS |
|-----------------------------------------------------|----------------|-------------------|--------------|
| <strong>MECHANICAL <sup>(1)</sup></strong>          |                |                   |              |
| Tensile Stress, break                               | 204            | MPa               | ASTM D638    |
| Flexural Modulus                                    | 9880           | MPa               | ASTM D790    |
| Tensile Stress, break                               | 214            | MPa               | ISO 527      |
| Tensile Strain, break                               | 2.1            | %                 | ISO 527      |
| Tensile Modulus, 1 mm/min                           | 11970          | MPa               | ISO 527      |
| Flexural Stress                                     | 309            | MPa               | ISO 178      |
| Flexural Modulus                                    | 10240          | MPa               | ISO 178      |
| <strong>IMPACT <sup>(1)</sup></strong>              |                |                   |              |
| Izod Impact, notched, 23°C                          | 277            | J/m               | ASTM D256    |
| Izod Impact, notched 80°10°4 +23°C                  | 29             | kJ/m <sup>2</sup> | ISO 180/1A   |
| Izod Impact, notched 80°10°4 -40°C                  | 25             | kJ/m <sup>2</sup> | ISO 180/1A   |
| <strong>THERMAL <sup>(1)</sup></strong>             |                |                   |              |
| HDT, 1.82 MPa, 3.2mm, unannealed                    | 245            | °C                | ASTM D648    |
| HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm               | 252            | °C                | ISO 75/Af    |
| Relative Temp Index, Elec <sup>(2)</sup>            | 95             | °C                | UL 746B      |
| Relative Temp Index, Mech w/impact <sup>(2)</sup>   | 65             | °C                | UL 746B      |
| Relative Temp Index, Mech w/o impact <sup>(2)</sup> | 75             | °C                | UL 746B      |
| <strong>PHYSICAL <sup>(1)</sup></strong>            |                |                   |              |
| Density                                             | 1.42           | g/cm <sup>3</sup> | ASTM D792    |
| Moisture Absorption, (23°C/50% RH/24 hrs)           | 0.97           | %                 | ASTM D570    |
| Density                                             | 1.42           | g/cm <sup>3</sup> | ISO 1183     |
| <strong>ELECTRICAL <sup>(1)</sup></strong>          |                |                   |              |
| Hot-Wire Ignition (HWI), PLC 0                      | ≥3             | mm                | UL 746A      |
| Hot-Wire Ignition (HWI), PLC 3                      | ≥1.5           | mm                | UL 746A      |
| High Amp Arc Ignition (HAI), PLC 0                  | ≥1.5           | mm                | UL 746A      |
| High Voltage Arc Track Rate {PLC}                   | 0              | PLC Code          | UL 746A      |
| Arc Resistance, Tungsten {PLC}                      | 6              | PLC Code          | ASTM D495    |

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| PROPERTIES                                            | TYPICAL VALUES                   | UNITS | TEST METHODS |
|-------------------------------------------------------|----------------------------------|-------|--------------|
| FLAME CHARACTERISTICS <sup>(2)</sup>                  |                                  |       |              |
| UL Yellow Card Link                                   | <a href="#">E45329-101344688</a> | -     | -            |
| UL Yellow Card Link 2                                 | <a href="#">E45329-101282651</a> | -     | -            |
| UL Recognized, 94HB Flame Class Rating <sup>(2)</sup> | ≥0.75                            | mm    | UL 94        |
| INJECTION MOLDING <sup>(3)</sup>                      |                                  |       |              |
| Drying Temperature                                    | 80                               | °C    |              |
| Drying Time                                           | 4                                | Hrs   |              |
| Maximum Moisture Content                              | 0.15 – 0.25                      | %     |              |
| Melt Temperature                                      | 290 – 305                        | °C    |              |
| Front - Zone 3 Temperature                            | 290 – 300                        | °C    |              |
| Middle - Zone 2 Temperature                           | 290 – 300                        | °C    |              |
| Rear - Zone 1 Temperature                             | 280 – 295                        | °C    |              |
| Mold Temperature                                      | 95 – 110                         | °C    |              |
| Back Pressure                                         | 0.2 – 0.3                        | MPa   |              |
| Screw Speed                                           | 30 – 60                          | rpm   |              |

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) 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.

(3) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

## 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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