

Technical Data Sheet

# Icorene N9903

Polymethyl Methacrylate Acrylic  
LyondellBasell Industries  
Custom Powders

**Product Description**

ICORENE® N9903 is a Polymethyl Methacrylate Acrylic (PMMA) material.

This grade is used for masterbatch applications

**General**

|                |                   |                    |
|----------------|-------------------|--------------------|
| Uses           | • Masterbatch     |                    |
| Agency Ratings | • EU Food Contact | • FDA Food Contact |
| Forms          | • Powder          |                    |

| Physical   | Nominal Value (English)    | Nominal Value (SI)     | Test Method     |
|--|----------------------------|------------------------|-----------------|
| Density  | 1.18 g/cm <sup>3</sup>     | 1.18 g/cm <sup>3</sup> | ISO 1183        |
| Melt Mass-Flow Rate (MFR) (230°c/3.8 Kg)                           | 15 g/10 min                | 15 g/10 min            | ISO 1133        |
| Mechanical   | Nominal Value (English)    | Nominal Value (SI)     | Test Method     |
| Tensile Stress (Break)   | 9430 psi                   | 65.0 MPa               | ISO 527-2       |
| Tensile Strain (Break)   | 5.0 %                      | 5.0 %                  | ISO 527-2       |
| Flexural Modulus   | 450000 psi                 | 3100 MPa               | ISO 178         |
| Impact   | Nominal Value (English)    | Nominal Value (SI)     | Test Method     |
| Charpy Notched Impact Strength                                     | 0.95 ft·lb/in <sup>2</sup> | 2.0 kJ/m <sup>2</sup>  | ISO 179/2C      |
| Notched Izod Impact Strength                                       | 0.86 ft·lb/in <sup>2</sup> | 1.8 kJ/m <sup>2</sup>  | ISO 180/1A      |
| Hardness   | Nominal Value (English)    | Nominal Value (SI)     | Test Method     |
| Rockwell Hardness (M-scale)  | 89                         | 89                     | ASTM D785       |
| Thermal  | Nominal Value (English)    | Nominal Value (SI)     | Test Method     |
| Deflection Temperature Under Load<br>66 Psi (0.45 Mpa), Unannealed | 180 °F                     | 82.0 °C                | ISO 75-2/B      |
| Vicat Softening Temperature  | 194 °F                     | 90.0 °C                | ISO 306/B       |
| Melting Temperature (DSC)  | 392 °F                     | 200 °C                 | Internal Method |
| Optical  | Nominal Value (English)    | Nominal Value (SI)     | Test Method     |
| Light Transmittance  | 92.0 %                     | 92.0 %                 | ASTM D1003      |
| Haze   | 0.500 %                    | 0.500 %                | ASTM D1003      |
| Thermoset  | Nominal Value (English)    | Nominal Value (SI)     |                 |
| Dry Time (176°f (80°c))  | 4.0 hr                     | 4.0 hr                 |                 |

**Notes**

These are typical property values not to be construed as specification limits.