

## Technical Data

### Product Description

Luran® 368R is a general purpose grade of SAN with well-balanced properties, suitable for injection molding and extrusion. It features very good transparency, good heat resistance and very good dimensional stability.

### FEATURES

- Excellent transparency
- Good surface appearance
- Good chemical resistance
- Good heat resistance
- Very good dimensional stability

### APPLICATIONS

- Cosmetic packaging
- Water filters
- Seat shell
- Sanitary devices
- Household appliances
- Tooth brush handles

### General

|                             |   |   |  |
|-----------------------------|---|---|--|
| Material Status             | • Commercial: Active  |   |  |
| Literature <sup>1</sup>     | • <a href="#">Technical Datasheet (English)</a>   |   |  |
| UL Yellow Card <sup>2</sup> | • <a href="#">E108538-100840247</a>   |   |  |
| Search for UL Yellow Card   | • <a href="#">INEOS Styrolution</a><br>• <a href="#">Luran®</a>                         |   |  |
| Availability                | • Africa & Middle East<br>• Asia Pacific  | • Europe<br>• Latin America   | • North America  |
| Features                    | • Chemical Resistant<br>• General Purpose   | • Good Dimensional Stability<br>• Good Heat Resistance                                    | • High Clarity<br>• Pleasing Surface Appearance  |
| Uses                        | • Appliances<br>• Cosmetic Packaging<br>• Filters                                       | • General Purpose<br>• Packaging<br>• Sanitary Products                                   | • Seats<br>• Toothbrush Handles  |
| Forms                       | • Pellets   |   |  |
| Processing Method           | • Extrusion   | • Injection Molding   |  |
| Multi-Point Data            | • Creep Modulus vs. Time (ISO 11403-1)<br>• Isochronous Stress vs. Strain (ISO 11403-1) | • Isothermal Stress vs. Strain (ISO 11403-1)<br>• Secant Modulus vs. Strain (ISO 11403-1) | • Specific Volume vs Temperature (ISO 11403-2)<br>• Viscosity vs. Shear Rate (ISO 11403-2) |

| Physical   | Nominal Value (English)   | Nominal Value (SI)        | Test Method |
|--|---------------------------|---------------------------|-------------|
| Density  | 1.08 g/cm <sup>3</sup>    | 1.08 g/cm <sup>3</sup>    | ISO 1183    |
| Apparent (Bulk) Density <sup>4</sup>                 | 0.65 g/cm <sup>3</sup>    | 0.65 g/cm <sup>3</sup>    |             |
| Melt Volume-Flow Rate (MVR) (220°C/10.0 kg)          | 10 cm <sup>3</sup> /10min | 10 cm <sup>3</sup> /10min | ISO 1133    |
| Molding Shrinkage                                    | 0.30 to 0.70 %            | 0.30 to 0.70 %            | ISO 294-4   |
| Water Absorption<br>Equilibrium, 73°F (23°C), 50% RH | 0.20 %                    | 0.20 %                    | ISO 62      |
| Mechanical   | Nominal Value (English)   | Nominal Value (SI)        | Test Method |
| Tensile Modulus                                      | 537000 psi                | 3700 MPa                  | ISO 527-1   |
| Tensile Stress (Yield, 73°F (23°C))                  | 10900 psi                 | 75.0 MPa                  | ISO 527-2   |
| Tensile Strain (Break, 73°F (23°C))                  | 3.0 %                     | 3.0 %                     | ISO 527-2   |
| Tensile Creep Modulus                                |                           |                           | ISO 899-1   |
| 1 hr   | 508000 psi                | 3500 MPa                  |             |
| 1000 hr  | 406000 psi                | 2800 MPa                  |             |
| Flexural Stress (73°F (23°C))                        | 18100 psi                 | 125 MPa                   | ISO 178     |



| Impact   | Nominal Value (English)           | Nominal Value (SI)    | Test Method   |
|--|-----------------------------------|-----------------------|---------------|
| Charpy Notched Impact Strength (73°F (23°C))   | 0.95 ft·lb/in <sup>2</sup>        | 2.0 kJ/m <sup>2</sup> | ISO 179/1eA   |
| Charpy Unnotched Impact Strength               |                                   |                       | ISO 179/1eU   |
| -22°F (-30°C)                                  | 8.6 ft·lb/in <sup>2</sup>         | 18 kJ/m <sup>2</sup>  |               |
| 73°F (23°C)                                    | 8.6 ft·lb/in <sup>2</sup>         | 18 kJ/m <sup>2</sup>  |               |
| Notched Izod Impact Strength                   |                                   |                       | ISO 180/A     |
| -22°F (-30°C)                                  | 0.95 ft·lb/in <sup>2</sup>        | 2.0 kJ/m <sup>2</sup> |               |
| 73°F (23°C)                                    | 0.95 ft·lb/in <sup>2</sup>        | 2.0 kJ/m <sup>2</sup> |               |
| Hardness                                       | Nominal Value (English)           | Nominal Value (SI)    | Test Method   |
| Ball Indentation Hardness                      | 23900 psi                         | 165 MPa               | ISO 2039-1    |
| Thermal  | Nominal Value (English)           | Nominal Value (SI)    | Test Method   |
| Deflection Temperature Under Load <sup>5</sup> |                                   |                       |               |
| 66 psi (0.45 MPa), Annealed                    | 212 °F                            | 100 °C                | ISO 75-2/B    |
| 264 psi (1.8 MPa), Annealed                    | 212 °F                            | 100 °C                | ISO 75-2/A    |
| Vicat Softening Temperature                    | 223 °F                            | 106 °C                | ISO 306/B50   |
| CLTE - Flow                                    | 3.9E-5 in/in/°F                   | 7.0E-5 cm/cm/°C       | ISO 11359-2   |
| Thermal Conductivity                           | 1.2 Btu·in/hr/ft <sup>2</sup> /°F | 0.17 W/m/K            | DIN 52612     |
| Electrical                                     | Nominal Value (English)           | Nominal Value (SI)    | Test Method   |
| Surface Resistivity                            | > 1.0E+15 ohms                    | > 1.0E+15 ohms        | IEC 62631-3-1 |
| Volume Resistivity                             | > 1.0E+16 ohms·cm                 | > 1.0E+16 ohms·cm     | IEC 62631-3-1 |
| Dielectric Constant (100 Hz)                   | 3.00                              | 3.00                  | IEC 62631-2-1 |
| Dissipation Factor                             |                                   |                       | IEC 62631-2-1 |
| 100 Hz   | 4.0E-3                            | 4.0E-3                |               |
| 1 MHz  | 7.0E-3                            | 7.0E-3                |               |
| Optical  | Nominal Value (English)           | Nominal Value (SI)    | Test Method   |
| Refractive Index <sup>6</sup>                  | 1.569                             | 1.569                 | ISO 489       |
| Injection                                      | Nominal Value (English)           | Nominal Value (SI)    |               |
| Drying Temperature                             | 176 °F                            | 80 °C                 |               |
| Drying Time                                    | 2.0 to 4.0 hr                     | 2.0 to 4.0 hr         |               |
| Processing (Melt) Temp                         | 428 to 500 °F                     | 220 to 260 °C         |               |
| Mold Temperature                               | 104 to 176 °F                     | 40 to 80 °C           |               |
| Injection Velocity                             | 472 in/min                        | 12 m/min              |               |

**Notes**

- <sup>1</sup> These links provide you with access to supplier literature. We work hard to keep them up to date; however you may find the most current literature from the supplier.
- <sup>2</sup> A UL Yellow Card contains UL-verified flammability and electrical characteristics. UL Prospector continually works to link Yellow Cards to individual plastic materials in Prospector, however this list may not include all of the appropriate links. It is important that you verify the association between these Yellow Cards and the plastic material found in Prospector. For a complete listing of Yellow Cards, visit the UL Yellow Card Search.
- <sup>3</sup> Typical properties: these are not to be construed as specifications.
- <sup>4</sup> With external lubricant
- <sup>5</sup> 4 h/80 °C
- <sup>6</sup> Sodium D Line



## Where to Buy

### Supplier

#### INEOS Styrolution

Frankfurt, Frankfurt Germany  
**Telephone:** +49 69 5095501200  
**Web:** <http://www.ineos-styrolution.com>

### Distributor

#### ALBIS Plastic

*ALBIS Plastic is a global distribution and compounding company. Contact ALBIS Plastic for availability of individual products per country.*

**Telephone:** +49-40-78105-0

**Web:** <http://www.albis.com/>

**Availability:** Algeria, Austria, Belgium, Bulgaria, China, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Hong Kong, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Morocco, Netherlands, Norway, Poland, Portugal, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Tunisia, Turkey, United Kingdom

#### Amco Polymers

**Telephone:** 800-262-6685

**Web:** <http://www.amcopolymers.com/>

**Availability:** North America

#### Entec Polymers

**Telephone:** 833-319-0299

**Web:** [https://www.entecpolymers.com/?utm\\_source=ul&utm\\_medium=paid%20association&utm\\_campaign=entec%20%7C%20entec%201&utm\\_term=ul%20%7C%20where%20to%20buy](https://www.entecpolymers.com/?utm_source=ul&utm_medium=paid%20association&utm_campaign=entec%20%7C%20entec%201&utm_term=ul%20%7C%20where%20to%20buy)

**Availability:** North America

#### M. Holland Canada Company

**Telephone:** 905-665-1168

**Web:** <http://www.mholland.com/>

**Availability:** Canada

#### M. Holland Company

**Telephone:** 855-497-1403

**Web:** <http://www.mholland.com/>

**Availability:** Mexico, United States

#### Ultrapolymers

*Ultrapolymers is a Pan European distribution company. Contact Ultrapolymers for availability of individual products by country.*

**Telephone:** +32-11-57-95-57

**Web:** <http://www.ultrapolymers.com/>

**Availability:** Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Ireland, Italy, Macedonia, Portugal, Romania, Russian Federation, Serbia, Slovakia, Slovenia, Spain, Turkey, Ukraine, United Kingdom

