

## Styrolution Luran® S 778 Q42 Colored ASA

Category : Polymer , Thermoplastic , ASA Polymer

### Material Notes:

Description: Injection molding grade with enhanced toughness and resistance to heat distortion. Especially suitable for exterior automotive components (e.g. radiator grills, rear end applique panels and mirror housings). Information provided by STYROLUTION, which is a joint venture between BASF and INEOS

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Styrolution-Luran-S-778-Q42-Colored-ASA.php](http://www.lookpolymers.com/polymer_Styrolution-Luran-S-778-Q42-Colored-ASA.php)

| Physical Properties                | Metric                               | English                              | Comments            |
|------------------------------------|--------------------------------------|--------------------------------------|---------------------|
| Density                            | 1.07 g/cc                            | 0.0387 lb/in <sup>3</sup>            | ISO 1183            |
| Water Absorption                   | 1.65 %                               | 1.65 %                               | Equilibrium; ISO 62 |
|                                    | 0.45 %                               | 0.45 %                               | ISO 62              |
|                                    | @Time 86400 sec                      | @Time 24.0 hour                      |                     |
| Moisture Absorption at Equilibrium | 0.35 %                               | 0.35 %                               | 23°C/50% RH; ISO 62 |
| Linear Mold Shrinkage, Flow        | 0.0040 - 0.0070 cm/cm                | 0.0040 - 0.0070 in/in                |                     |
| Melt Flow                          | 5.35 g/10 min                        | 5.35 g/10 min                        | ISO 1133            |
|                                    | @Load 10.0 kg,<br>Temperature 220 °C | @Load 22.0 lb,<br>Temperature 428 °F |                     |

| Mechanical Properties     | Metric                          | English                             | Comments                         |
|---------------------------|---------------------------------|-------------------------------------|----------------------------------|
| Ball Indentation Hardness | 85.0 MPa                        | 12300 psi                           | ISO 2039-1                       |
|                           | @Load 36.5 kg,<br>Time 30.0 sec | @Load 80.5 lb,<br>Time 0.00833 hour |                                  |
| Tensile Strength, Yield   | 54.0 MPa                        | 7830 psi                            | 50 mm/min; ISO 527-1/-2          |
| Elongation at Break       | 8.0 %                           | 8.0 %                               | Nominal, 50 mm/min; ISO 527-1/-2 |
| Elongation at Yield       | 3.4 %                           | 3.4 %                               | 50 mm/min; ISO 527-1/-2          |
| Tensile Modulus           | 2.50 GPa                        | 363 ksi                             | ISO 527-1/-2                     |
| Flexural Strength         | 80.0 MPa                        | 11600 psi                           | ISO 178                          |
| Izod Impact, Notched      | 2.50 J/cm                       | 4.68 ft-lb/in                       | ASTM D256                        |
| Charpy Impact Unnotched   | 9.00 J/cm <sup>2</sup>          | 42.8 ft-lb/in <sup>2</sup>          | ISO 179/1eU                      |
|                           | @Temperature -30.0<br>°C        | @Temperature -22.0<br>°F            |                                  |

| Mechanical Properties             | Metric                                            | English                                              | Comments    |
|-----------------------------------|---------------------------------------------------|------------------------------------------------------|-------------|
|                                   | 25.0 J/cm <sup>2</sup><br>@Temperature 23.0 Â°C   | 119 ft-lb/in <sup>2</sup><br>@Temperature 73.4 Â°F   | ISO 179/1eJ |
| Charpy Impact, Notched            | 0.400 J/cm <sup>2</sup><br>@Temperature -30.0 Â°C | 1.90 ft-lb/in <sup>2</sup><br>@Temperature -22.0 Â°F | ISO 179/1eA |
|                                   | 1.50 J/cm <sup>2</sup><br>@Temperature 23.0 Â°C   | 7.14 ft-lb/in <sup>2</sup><br>@Temperature 73.4 Â°F  | ISO 179/1eA |
| Tensile Creep Modulus, 1000 hours | 1250 MPa<br>@Strain <=0.500 %                     | 181000 psi<br>@Strain <=0.500 %                      | ISO 899-1   |

| Thermal Properties                          | Metric                                               | English                                                | Comments          |
|---------------------------------------------|------------------------------------------------------|--------------------------------------------------------|-------------------|
| CTE, linear, Parallel to Flow               | 80.0 - 110 Âµm/m-Â°C<br>@Temperature 23.0 - 80.0 Â°C | 44.4 - 61.1 Âµin/in-Â°F<br>@Temperature 73.4 - 176 Â°F | ISO 11359-1/-2    |
| Thermal Conductivity                        | 0.170 W/m-K                                          | 1.18 BTU-in/hr-ftÂ²-Â°F                                | DIN 52612-1       |
| Maximum Service Temperature, Air            | 90.0 Â°C                                             | 194 Â°F                                                |                   |
| Deflection Temperature at 0.46 MPa (66 psi) | 106 Â°C                                              | 223 Â°F                                                | ISO 75-1/-2       |
| Deflection Temperature at 1.8 MPa (264 psi) | 103 Â°C                                              | 217 Â°F                                                | ISO 75-1/-2       |
| Vicat Softening Point                       | 104 Â°C                                              | 219 Â°F                                                | VST/B/50; ISO 306 |
|                                             | 113 Â°C                                              | 235 Â°F                                                | VST/A/50; ISO 306 |
| Flammability, UL94                          | HB<br>@Thickness 1.60 mm                             | HB<br>@Thickness 0.0630 in                             | IEC 60695-11-10   |
|                                             | HB<br>@Diameter 4.00 mm                              | HB<br>@Diameter 0.157 in                               | IEC 60707         |

| Electrical Properties | Metric                       | English                      | Comments  |
|-----------------------|------------------------------|------------------------------|-----------|
| Volume Resistivity    | 1.00e+12 ohm-cm              | 1.00e+12 ohm-cm              | IEC 60093 |
| Surface Resistance    | 1.00e+13 ohm                 | 1.00e+13 ohm                 | IEC 60093 |
| Dielectric Constant   | 3.5<br>@Frequency 1.00e+6 Hz | 3.5<br>@Frequency 1.00e+6 Hz | IEC 60250 |

| Electrical Properties      | Metric                | English               | Comments                 |
|----------------------------|-----------------------|-----------------------|--------------------------|
|                            | @Frequency 100 Hz     | @Frequency 100 Hz     | IEC 60250                |
| Dielectric Strength        | 35.0 kV/mm            | 889 kV/in             | K20/P20; IEC 60243-1     |
| Dissipation Factor         | 0.0090                | 0.0090                | IEC 60250                |
|                            | @Frequency 100 Hz     | @Frequency 100 Hz     |                          |
|                            | 0.033                 | 0.033                 | IEC 60250                |
|                            | @Frequency 1.00e+6 Hz | @Frequency 1.00e+6 Hz |                          |
| Comparative Tracking Index | 600 V                 | 600 V                 | Test Liquid A; IEC 60112 |

| Processing Properties | Metric          | English       | Comments   |
|-----------------------|-----------------|---------------|------------|
| Melt Temperature      | 240 - 280 Â°C   | 464 - 536 Â°F | Injection  |
| Mold Temperature      | 40.0 - 80.0 Â°C | 104 - 176 Â°F | Injection  |
| Drying Temperature    | 80.0 Â°C        | 176 Â°F       | Pre-drying |
| Dry Time              | 2 - 4 hour      | 2 - 4 hour    | Pre-drying |

| Descriptive Properties       | Value             | Comments |
|------------------------------|-------------------|----------|
| Color                        | Black 23609 Q42   |          |
|                              | Black 25991 Q42   |          |
|                              | Black 33753 Q42   |          |
|                              | Black 36733 Q42   |          |
|                              | Black 36831 Q42   |          |
|                              | Black 89737 Q42   |          |
|                              | Brown 37032 Q42   |          |
|                              | Gray 35316 Q42    |          |
|                              | Gray 37192 Q42    |          |
|                              | Gray 427345 Q42   |          |
| Commercial Status            | Europe            |          |
| Primary Processing Technique | Injection Molding |          |

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215,Fengxian District, Shanghai City,China