

## Total Lacqrene® 4801 (discontinued \*\*)

Category : Polymer , Thermoplastic , Polystyrene (PS)

### Material Notes:

LACQRENE® 4801 is an easy flowing, high impact polystyrene for injection molding. The very good processing characteristics of this grade allows for the production of thin articles with long flow paths or complex shapes. A high level of mechanical properties are retained at very low temperatures (-40°C) which makes this grade particularly suitable for ice cream containers. Applications: Ice cream containers, Models, Presentation boxes, General containers, Medical products. Information provided provided by Total Petrochemicals. Total Petrochemicals includes former Fina and Atofina plastics product lines.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Total-Lacqrene-4801-nbspdiscontinued-.php](http://www.lookpolymers.com/polymer_Total-Lacqrene-4801-nbspdiscontinued-.php)

| Physical Properties   | Metric  | English   | Comments |
|-----------------------|---|---|----------|
| Density               | 1.05 g/cc   | 0.0379 lb/in <sup>3</sup>                           | ISO 1183 |
| Water Absorption      | <= 0.10 %   | <= 0.10 %   | ISO 62   |
| Linear Mold Shrinkage | 0.0040 - 0.0070 cm/cm                               | 0.0040 - 0.0070 in/in                               |          |
| Melt Flow             | 20 g/10 min<br>@Load 5.00 kg,<br>Temperature 200 °C | 20 g/10 min<br>@Load 11.0 lb,<br>Temperature 392 °F |          |

| Mechanical Properties      | Metric                 | English                    | Comments    |
|----------------------------|------------------------|----------------------------|-------------|
| Hardness, Rockwell R       | 75                     | 75                         | ISO 2039-2  |
| Tensile Strength at Break  | 16.0 MPa               | 2320 psi                   | ISO 527-2   |
| Tensile Strength, Yield    | 21.0 MPa               | 3050 psi                   | ISO 527-2   |
| Elongation at Break        | 47 %                   | 47 %                       | ISO 527-2   |
| Tensile Modulus            | 1.90 GPa               | 276 ksi                    | ISO 527-2   |
| Flexural Modulus           | 1.90 GPa               | 276 ksi                    | ISO 178     |
| Izod Impact, Notched (ISO) | 10.0 kJ/m <sup>2</sup> | 4.76 ft-lb/in <sup>2</sup> | ISO 180/1A  |
| Charpy Impact, Notched     | 1.00 J/cm <sup>2</sup> | 4.76 ft-lb/in <sup>2</sup> | ISO 179/1eU |

| Thermal Properties                          | Metric                               | English                                | Comments            |
|---|--------------------------------------|--|---------------------|
| CTE, linear                                 | 91.0 µm/m-°C<br>@Temperature 20.0 °C | 50.6 µin/in-°F<br>@Temperature 68.0 °F |                     |
| Deflection Temperature at 0.46 MPa (66 psi) | 77.0 °C                              | 171 °F                                 | Annealed; ISO 75-2A |

| Thermal Properties                  | Metric  | English | Comments                              |
|-------------------------------------|---------|---------|---------------------------------------|
| Temperature at 1.8 MPa<br>(264 psi) | 85.0 °C | 185 °F  | Unannealed; ISO 75-2A                 |
| Vicat Softening Point               | 76.0 °C | 169 °F  | 50N (T° increase = 5°C/h); ISO 306B50 |
|                                     | 87.0 °C | 189 °F  | 10N; ISO 306A50                       |

| Electrical Properties          | Metric                         | English                        | Comments  |
|--------------------------------|--------------------------------|--------------------------------|-----------|
| Surface Resistivity per Square | $\geq 1.00 \times 10^{13}$ ohm | $\geq 1.00 \times 10^{13}$ ohm | ISO IEC93 |
| Dielectric Strength            | 150 kV/mm                      | 3810 kV/in                     |           |

## 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