

## ExxonMobil PP7684KN Impact Copolymer

Category : Polymer , Thermoplastic , Polypropylene (PP) , Polypropylene, Impact Modified; Molded/Extruded

### Material Notes:

**Product Description:** A high crystallinity, high impact copolymer resin with medium melt flow rate and excellent processing attributes. It is designed for injection molded small and large appliance parts.  
**Availability:** North America and Asia Pacific  
**Features:** Fast Molding Cycle  
**Good Heat Aging Resistance**  
**Good Processability**  
**High Impact Resistance**  
**High Stiffness**  
**Low Warpage**  
**Uses:** Appliances Consumer Applications  
**Crates**  
**Industrial Applications**  
**Packaging**  
**Tool/Tote Box**  
**Processing Method:** Injection Molding and Compounding  
**Information provided by ExxonMobil Chemical**

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_ExxonMobil-PP7684KN-Impact-Copolymer.php](http://www.lookpolymers.com/polymer_ExxonMobil-PP7684KN-Impact-Copolymer.php)

| Physical Properties | Metric                            | English                           | Comments   |
|---------------------|-----------------------------------|-----------------------------------|------------|
| Density             | 0.900 g/cc                        | 0.0325 lb/in <sup>3</sup>         | ASTM D792  |
| Melt Flow           | 20 g/10 min                       | 20 g/10 min                       | ASTM D1238 |
|                     | @Load 2.16 kg, Temperature 230 °C | @Load 4.76 lb, Temperature 446 °F |            |

| Mechanical Properties       | Metric                 | English                    | Comments                           |
|-----------------------------|------------------------|----------------------------|------------------------------------|
| Tensile Strength, Yield     | 24.4 MPa               | 3540 psi                   | ISO 527-2/50                       |
|                             | 25.5 MPa               | 3700 psi                   | 2 in/min; ASTM D638                |
| Elongation at Yield         | 3.4 %                  | 3.4 %                      | ISO 527-2/50                       |
|                             | 5.0 %                  | 5.0 %                      | ASTM D638                          |
| Tensile Modulus             | 1.32 GPa               | 191 ksi                    | ISO 527-2/1                        |
| Flexural Modulus            | 1.28 GPa               | 185 ksi                    | 1% secant, 0.05 in/min.; ASTM D790 |
| Flexural Modulus, 1% Secant | 1290 MPa               | 187000 psi                 | ASTM D790A                         |
|                             | 1480 MPa               | 214000 psi                 | ASTM D790B                         |
| Izod Impact, Notched        | 1.66 J/cm              | 3.10 ft-lb/in              | ASTM D256                          |
| Izod Impact, Notched (ISO)  | 3.99 kJ/m <sup>2</sup> | 1.90 ft-lb/in <sup>2</sup> | ISO 180/1A                         |
|                             | @Temperature -40.0 °C  | @Temperature -40.0 °F      |                                    |
|                             | 4.62 kJ/m <sup>2</sup> | 2.20 ft-lb/in <sup>2</sup> | ISO 180/1A                         |
|                             | @Temperature -17.8 °C  | @Temperature 0.000 °F      |                                    |
|                             | 8.40 kJ/m <sup>2</sup> | 4.00 ft-lb/in <sup>2</sup> | ISO 180/1A                         |
|                             | @Temperature 22.8 °C   | @Temperature 73.0 °F       |                                    |

| Mechanical Properties  | Metric/cm²                                  | English/lb/in²                               | Comments   |
|------------------------|---------------------------------------------|----------------------------------------------|------------|
| Charpy Impact, Notched | @Temperature -30.0 °C                       | @Temperature -22.0 °F                        | ISO 79/1eA |
|                        | 4.83 J/cm²                                  | 23.0 ft-lb/in²                               | ISO 79/1eA |
|                        | @Temperature -20.0 °C                       | @Temperature -4.00 °F                        | ISO 79/1eA |
|                        | 6.51 J/cm²                                  | 31.0 ft-lb/in²                               | ISO 79/1eA |
|                        | @Temperature 0.000 °C                       | @Temperature 32.0 °F                         | ISO 79/1eA |
| Gardner Impact         | 10.1 J/cm²                                  | 48.1 ft-lb/in²                               | ISO 79/1eA |
|                        | @Temperature 22.8 °C                        | @Temperature 73.0 °F                         | ISO 79/1eA |
|                        | 19.1 J                                      | 14.1 ft-lb                                   | ASTM D5420 |
|                        | @Thickness 3.17 mm,<br>Temperature -30.0 °C | @Thickness 0.125 in,<br>Temperature -22.0 °F | ASTM D5420 |

| Thermal Properties                             | Metric  | English | Comments    |
|------------------------------------------------|---------|---------|-------------|
| Deflection Temperature at 0.46 MPa<br>(66 psi) | 102 °C  | 216 °F  | ASTM D648   |
| Deflection Temperature at 1.8 MPa<br>(264 psi) | 92.8 °C | 199 °F  | ISO 75-2/Bf |

| Processing Properties  | Metric       | English      | Comments |
|------------------------|--------------|--------------|----------|
| Processing Temperature | 204 - 232 °C | 399 - 450 °F | Typical  |

## 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