



**TotalEnergies**

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## Polypropylene 7844CR

Technical Data Sheet  
Polypropylene – Random Copolymer  
Produced in the United States

### Description

**Polypropylene 7844CR** resist the embrittlement and yellowing after effective doses of sterilizing radiation.

**Impact:** 7844CR produces molded parts with high impact compared with parts molded from other random copolymers.

**Easy Flow:** 7844CR exhibits exceptionally easy flow characteristics.

**FDA:** 7844CR complies with all applicable FDA regulations for food contact applications.

**Lubricated:** 7844CR contains a lubricant for improved demolding.

**Recommended Applications:** 7844CR is recommended for injection molding medical devices, housewares, hinged closures and other items calling for good impact, flexibility and good clarity.

**Processing:** 7844CR resin processes on conventional injection molding equipment with typical melt temperatures of 390-450°F (200-232°C).

**Made to Order Grade: Two railcar minimum order; take or pay agreement required; 90-day minimum lead time**

### Characteristics

|   | Method             | Unit                      | Typical Value |
|---|--------------------|---------------------------|---------------|
| <b>Rheological Properties</b>           |                    |                           |               |
| Melt Flow                               | D-1238             | g/10 min                  | 27            |
| <b>Mechanical Properties</b>            |                    |                           |               |
| Elongation                              | D-638              | %                         | 10            |
| Tensile Modulus                         | D-638              | Psi (MPa)                 | 125,000 (860) |
| Flexural Modulus                        | D-790              | psi (MPa)                 | 100,000 (690) |
| Tensile Strength at Yield               | D-638              | psi (MPa)                 | 3250 (22.4)   |
| Izod Impact @ 73°F<br>Notched           | D-256A             | ft.-lbs/in. (J/m)         | 0.9 (48)      |
| Drop Impact, 0.125" plaques             | D-5420             | In.-lbs. (J)              | 200 (23)      |
| Hardness                                | D-288A             | Rockwell R                | 62            |
| <b>Thermal Properties<sup>(1)</sup></b> |                    |                           |               |
| Melting Point                           | DSC <sup>(2)</sup> | °F (°C)                   | 293(145)      |
| Heat Deflection<br>°F @ 66<br>°C @ 4.64 | D-648              | psi<br>kg/cm <sup>2</sup> | 162<br>72     |
| <b>Other Physical Properties</b>        |                    |                           |               |
| Density                                 | D-1505             | g/cc                      | 0.900         |

(1) Data developed under laboratory conditions and are not to be used as specification, maxima or minima.

(2) MP determined with a DSC-2 Differential Scanning Calorimeter. Test procedure available upon request.