



**TotalEnergies**

TotalEnergies Petrochemicals & Refining USA, Inc.  
Polymers Americas

**Lumicene® Polypropylene M8623KZ**

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

## Description

**Clarity** – M8623KZ exhibits excellent clarity in molded parts.

**Impact** – M8623KZ produces molded parts with improved impact in comparison to parts molded from conventional clarified random copolymers.

**Antistat** – M8623KZ contains an antistat to help protect molded parts from dust accumulation.

**FDA** – M8623KZ complies with all applicable FDA regulations for food contact applications.

**Applications** – M8623KZ is recommended for injection molding housewares, caps and closures, packaging and other items requiring a balance of impact, clarity and easy mold release.

**Processing** – M8623KZ resin processes on conventional injection molding equipment with typical melt temperatures of 390°F-450°F (200°C-232°C).

## Characteristics

|                                            | Method               | Unit              | Typical Value   |
|--------------------------------------------|----------------------|-------------------|-----------------|
| <b>Rheological Properties</b>              |                      |                   |                 |
| Melt Flow                                  | D-1238 Condition "L" | g/10 min          | 12              |
| <b>Mechanical Properties</b>               |                      |                   |                 |
| Tensile                                    | ASTM D-638           | psi (MPa)         | 4,500 (31)      |
| Elongation                                 | ASTM D-638           | %                 | 9               |
| Tensile Modulus                            | ASTM D-638           | psi (MPa)         | 190,000 (1,310) |
| Flexural Modulus                           | ASTM D-790           | psi (MPa)         | 190,000 (1,310) |
| Izod Impact @73°F                          | ASTM D-256A          | ft.-lbs/in. (J/m) | 1.0 (53)        |
| Notched                                    |                      | ft.-lbs/in. (J/m) | No Break        |
| Unnotched                                  |                      |                   |                 |
| Haze, 0.04" plaques                        | D-1003               | %                 | 8               |
| <b>Thermal Properties<sup>(1)(2)</sup></b> |                      |                   |                 |
| Melting Point                              | DSC                  | °F (°C)           | 271 (133)       |
| Heat Deflection                            | ASTM D-648           | °F                | 171             |
| @ 66 psi                                   |                      | °C                | 77              |
| @ 4.64 kg/cm <sup>2</sup>                  |                      |                   |                 |
| <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.  
(3) Test procedure available upon request

Rev: Sept 2021

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All tests were run under laboratory conditions. ASTM (where applicable) testing procedures. The data are intended as a general guide only and do not necessarily represent results that may be obtained elsewhere. The use of TotalEnergies products must be guided by the users own methods for selection of proper formulation. TotalEnergies Petrochemicals & Refining USA Inc. disclaims any responsibility for misuse or misapplication of its products. TotalEnergies MAKES NO WARRANTY OF MERCHANTABILITY AND THERE IS NO WARRANTY THAT GOODS SUPPLIED SHALL BE FIT FOR ANY PARTICULAR PURPOSE. TotalEnergies' liability and customer's exclusive remedy for any claims arising out of sales of its products are expressly limited at customer option to replacement of non-performing goods or payment not to exceed the purchase price plus transportation charges thereon in respect to any material which damage is claimed.