



## Product Data

### TITANPRO SM198

#### FOR BLOW MOLDING, SHEET EXTRUSION AND INJECTION MOLDING

|                     |                                                                                                                                                                                                                                                                                   |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>CHARACTER</b>    | Polypropylene random copolymer.<br>Titanpro SM198 is a clarified grade designed for high transparency articles which complies with the U.S. Food and Drug Administration (FDA) regulation as specified in 21 CFR 177.1520(a)(3)(i) and (c)3.1a.<br>TSCA Registry: CAS# 9010-79-1. |
| <b>APPLICATIONS</b> | Injection and extrusion blow molding containers, extruded sheet for thermoformed containers and lids, multilayer coextruded structures and sheet, injection molded articles requiring high toughness.                                                                             |
| <b>ADVANTAGES</b>   | Superior clarity, low odour & taste, hot fillable, good rigidity and impact resistance, cycle time reduction with low processing melt temperature, utilities cost saving and process versatility.                                                                                 |
| <b>FABRICATION</b>  | Equipment - general injection, extrusion blow molding, sheet extrusion and thermoforming machines.<br>Techniques - standard processing.                                                                                                                                           |

| <b>TYPICAL RESIN PROPERTIES</b> <sup>(a)</sup>        | <b>UNIT</b>        | <b>SM198</b> | <b>ASTM METHOD</b> <sup>(b)</sup> |
|-------------------------------------------------------|--------------------|--------------|-----------------------------------|
| Melt Flow Rate, at 230°C                              | g/10 min           | <b>1.6</b>   | D1238                             |
| Density                                               | g/cm <sup>3</sup>  | <b>0.9</b>   | D1505                             |
| Tensile Strength at Yield                             | kg/cm <sup>2</sup> | <b>290</b>   | D638                              |
| Elongation at Yield                                   | %                  | <b>14</b>    | D638                              |
| Flexural Modulus                                      | kg/cm <sup>2</sup> | <b>11000</b> | D790B                             |
| Notched Izod Impact Strength at 23°C                  | kg·cm/cm           | <b>34</b>    | D256A                             |
| Heat Deflection Temperature at 4.6 kg/cm <sup>2</sup> | °C                 | <b>78</b>    | D648                              |
| Rockwell Hardness                                     | R scale            | <b>77</b>    | D785A                             |
| Water absorption after 24 hours                       | %                  | <b>0.02</b>  | D570                              |

(a) Values shown are average and are not to be considered as specifications.

(b) ASTM test methods are latest under the Society's current procedures.

Shrinkage : 1.3 - 1.4% depending on the product wall thickness and molding parameters.

#### UL Environment Claim Validation Mark

Titanpro® SM198 enables 10% of energy savings and 10% of reduced CO<sub>2</sub> emission on average for the production of clarified polypropylene injection molded articles.



**10% Energy Savings**



**10% Reduced CO<sub>2</sub> Emission**

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