# Product Data

## TITANPRO SM488
## FOR THIN WALLED, HIGH CLARITY INJECTION MOLDING

**CHARACTER** Polypropylene random copolymer.
Titanpro SM488 is a superb clarity 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.
TSCA Registry: CAS# 9010-79-1

**APPLICATIONS** Superb clarity ISBM articles, baby bottles, drinking containers, housewares, healthcare devices, thin-walled containers, storage containers.

**ADVANTAGES** Superb clarity, good surface finish and color, suitable for hot filling.

**FABRICATION** Equipment - injection stretch blow molding (ISBM) machine, injection molding machine.
Techniques - standard processing.

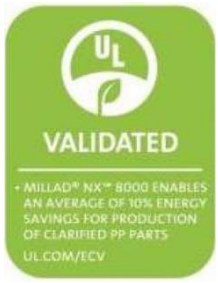
| TYPICAL RESIN PROPERTIES [a] | UNIT | SM488 | ASTM METHOD [b] |
|---|---|---|---|
| Melt Flow Rate, at 230°C | g/10 min | **20** | D1238 |
| Density | g/cm³ | **0.9** | D1505 |
| Tensile Strength at Yield | kg/cm² | **290** | D638 |
| Elongation at Yield | % | **12** | D638 |
| Flexural Modulus | kg/cm² | **12000** | D790B |
| Notched Izod Impact Strength at 23°C | kg·cm/cm | **6** | D256A |
| Heat Deflection Temperature at 4.6 kg/cm² | °C | **76** | D648 |
| Rockwell Hardness | R scale | **92** | D785A |
| Water absorption after 24 hours | % | **0.02** | 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® SM488 enables 10% of energy savings and 10% of reduced $CO_2$ emission on average for the production of clarified polypropylene injection molded articles.





10% Energy Savings


10% Reduced CO2 Emission