# COSMOPLENE® AS164

## CHARACTERISTICS

**COSMOPLENE AS164** is a melt stable, high stiffness, super high impact PP copolymer manufactured by gas phase process licensed from Sumitomo Chemical Co. Japan.

## APPLICATIONS

**COSMOPLENE AS164** is suitable for products such as injection for seat bottom, extrusion for corrugated sheet, pipe and fittings, bicycle rims, blow bottle etc.

**AS164** complies with U.S. FDA Regulation 21 CFR 177.1520 (C) 3.2a, as long as it is used unmodified and processed according to standard manufacturing practices in the industries.

Note : Direct food contact is subjected to the extraction provisions of the regulation on the finished food contact article.

## PHYSICAL PROPERTIES

| ITEM | UNIT | AS164 | TEST METHOD |
|---|---|---|---|
| Melt Flow Rate | g/10 min | 1.2 | ASTM D1238 |
| Density | g/cm$^3$ | 0.90 | ASTM D792 |
| Tensile Strength at Yield | MPa | 28.5 | ASTM D638 |
| Tensile Strength at Break | MPa | 26.0 | ASTM D638 |
| Elongation at Break | % | > 500 | ASTM D638 |
| Flexural Modulus | MPa | 1100 | ASTM D790 |
| Izod Impact        (23°C) | J/m | 485 | ASTM D256 |
| (-20°C) | J/m | 62 | ASTM D256 |
| Rockwell Hardness | R scale | 86 | ASTM D785 |
| HDT        (0.45MPa) | °C | 117 | ASTM D648 |
| Shrinkage MD/TD   (2mm) | % | 1.5/1.4 | TPC METHOD |

## INJECTION

| | | |
|---|---|---|
| Cylinder Temp (°C) | : | 190 - 230 |
| Mold Temp (°C) | : | 30 |
| Clamp Pressure (Kg/cm²) | : | 100 |
| Injection Pressure G (Kg/cm²) | : | 70 |

- The figures presented are typical laboratory averages, only for reference.

- The information is based on our current knowledge, is subjected to continuous updates and is intended to suggest/ recommend product applications and to provide typical data on the related properties. It should not therefore be construed as guaranteeing any specific property of the product. TPC makes no warranty of any kind, expressed or implied, regarding the accuracy of these data.

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OUR COMMITMENT TO SUSTAINABILITY

CERTIFICATE SG99/16071     CERTIFICATE SG05/00847     SS 506 Part 3: 2006 Cert No CIS/86090     OHSAS 18001:2007 Cert No CIS/86090

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**COSMOPLENE®**
POLYPROPYLENE

**COSMOTHENE®**
LOW DENSITY POLYETHYLENE

**COSMOTHENE® EVA**
ETHYLENE VINYL ACETATE COPOLYMER