

# Polypropylene

## Aramco PP CP55NK

### Product Description

Aramco PP CP55NK is a block copolymer polypropylene resin and is typically used for general purpose injection molding application. Molded parts made from this resin typically exhibits high impact and high stiffness.

This product is formulated with nucleating agent.

### Typical Applications

Battery casing, containers, chairs, seat bases, general purpose.

This product is not intended for use in medical and pharmaceutical applications.

| Physical Properties                        | Unit              | Test Method        | Value <sup>(1)</sup> |
|--|-------------------|--------------------|----------------------|
| Melt Flow Index (230°C/2.16kg)             | g/10min           | ASTM D1238         | 5.5                  |
| Density                                    | g/cm <sup>3</sup> | ASTM D792 Method A | 0.9                  |
| <b>Mechanical Properties<sup>(2)</sup></b> |                   |                    |                      |
| Tensile Strength at Yield                  | MPa               | ASTM D638          | 25                   |
| Tensile Strength at Break                  | MPa               | ASTM D638          | 13                   |
| Flexural Modulus                           | MPa               | ASTM D790          | 1170                 |
| Izod Impact, Notched 23 °C                 | kJ/m <sup>2</sup> | ASTM D256          | 10                   |
| Izod Impact, Notched -20 °C                | kJ/m <sup>2</sup> | ASTM D256          | 4                    |
| Hardness Rockwell                          | R scale           | ASTM D785          | 90                   |
| <b>Thermal Properties<sup>(2)</sup></b>    |                   |                    |                      |
| Vicat Softening Temperature @10N           | °C                | ASTM D1525         | 154                  |
| Heat Deflection Temperature 0.45 MPa       | °C                | ASTM D648          | 106                  |
| <b>Other Properties</b>                    |                   |                    |                      |
| Shrinkage MD/TD                            | %                 | SUMIKA             | 1.4 / 1.4            |
| Flammability                               |                   | UL94               | HB                   |

(1) Typical values only, not to be construed as specification limits

(2) Test specimen preparation method : Pursuant to ASTM D4101

**Processing conditions:** Recommended melt temperature : 190 – 230 °C

**Storage and handling:** Aramco PP CP55NK should be stored in a dry cool place with adequate ventilation and protected from UV-light at temperature below 50 °C

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