



## Moplen RP441N

### Polypropylene, Random Copolymer

#### Product Description

Moplen RP441N is a polypropylene random copolymer manufactured using the Spheripol process. With its excellent gloss, clarity and flow, combined with its balance of rigidity and impact, this grade is particularly suitable for injection molding. Potential end use applications include housewares and Injection Stretch Blow Moulding (ISBM) of bottles.

#### Product Characteristics

|                               |                                                                                      |
|-------------------------------|--------------------------------------------------------------------------------------|
| Status                        | Commercial: Active                                                                   |
| Test Method used              | ASTM                                                                                 |
| Availability                  | Asia-Pacific, Australia/NZ, Africa-Middle East                                       |
| Processing Methods            | Injection Molding, Injection Stretch Blow Molding                                    |
| Features                      | High Clarity, Random Copolymer, Good Flow, High Gloss, Low to No Odor, Good Strength |
| Typical Customer Applications | Bottles For Consumer Goods, Clear Containers, Housewares                             |

| Typical Properties                         | Method      | Value | Unit     |
|--------------------------------------------|-------------|-------|----------|
| Physical                                   |             |       |          |
| Density -Specific Gravity                  | ASTM D 792  | 0.9   | g/cm³    |
| Melt Flow Rate (230°C/2.16kg)              | ASTM D 1238 | 10    | g/10 min |
| Note: ASTM D1238L                          |             |       |          |
| Mechanical                                 |             |       |          |
| Flexural Modulus                           | ASTM D 790  | 14000 | kg/cm²   |
| Tensile Strength @ Yield                   | ASTM D 638  | 340   | kg/cm²   |
| Tensile Elongation @ Yield                 | ASTM D 638  | 8     | %        |
| Impact                                     |             |       |          |
| Notched Izod Impact<br>(23 °C)<br>(-20 °C) | ASTM D 256  |       |          |
|                                            |             | 5.5   | kg-cm/cm |
|                                            |             | 2     | kg-cm/cm |
| Hardness                                   |             |       |          |
| Rockwell Hardness (R Scale)                | ASTM D 785  | 98    |          |
| Thermal                                    |             |       |          |
| Heat deflection temperature at 0.46 N/mm2  | ASTM D 648  | 104   | °C       |
| Optical                                    |             |       |          |
| Haze                                       | ASTM D 1003 | 18    | %        |

#### Notes

Typical properties; not to be construed as specifications.