

## APEL™ APL6015T

Mitsui Chemicals America, Inc. - *Cyclic Olefin Copolymer*

### General Information

#### General

|                 |                      |
|-----------------|----------------------|
| Material Status | • Commercial: Active |
| Availability    | • North America      |
| Uses            | • Medical Packaging  |
| Forms           | • Pellets            |

### Properties <sup>1</sup>

| Physical                                                | Nominal Value | Unit                                | Test Method |
|---------------------------------------------------------|---------------|-------------------------------------|-------------|
| Density / Specific Gravity                              | 1.04          |                                     | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (260°C/2.16 kg)               | 10            | g/10 min                            | ASTM D1238  |
| Molding Shrinkage - Flow                                | 6.0E-3        | in/in                               | ASTM D955   |
| Mechanical                                              | Nominal Value | Unit                                | Test Method |
| Tensile Strength (Yield)                                | 8700          | psi                                 | ASTM D638   |
| Tensile Elongation (Break)                              | 3.0           | %                                   | ASTM D638   |
| Flexural Modulus                                        | 464000        | psi                                 | ASTM D790   |
| Flexural Strength                                       | 16000         | psi                                 | ASTM D790   |
| Films                                                   | Nominal Value | Unit                                | Test Method |
| Water Vapor Transmission Rate                           | 0.23          | g·mil/100in <sup>2</sup> /atm/24 hr | ASTM F1249  |
| Impact                                                  | Nominal Value | Unit                                | Test Method |
| Notched Izod Impact                                     | 0.47          | ft·lb/in                            | ASTM D256   |
| Thermal                                                 | Nominal Value | Unit                                | Test Method |
| Deflection Temperature Under Load (264 psi, Unannealed) | 275           | °F                                  | ASTM D648   |
| Glass Transition Temperature                            | 293           | °F                                  | DSC         |
| Optical                                                 | Nominal Value | Unit                                | Test Method |
| Refractive Index                                        | 1.540         |                                     | ASTM D542   |
| Light Transmittance                                     | 90.0          | %                                   | ASTM D1003  |
| Haze                                                    | 4.00          | %                                   | ASTM D1003  |

#### Additional Information

Unnotched Izod Impact, ASTM D256: 10 kJ/m<sup>2</sup>  
TMA: 155°C

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

