

# Shinko-Lac® ASA TW35

Acrylonitrile Styrene Acrylate  
Mitsubishi Rayon America Inc.

Technical Data

Product Description

Shinko-Lac® ASA TW35 is an Acrylonitrile Styrene Acrylate (ASA) material. It is available in North America for injection molding. Primary attribute of Shinko-Lac® ASA TW35: Heat Resistant.

General

|                   |                        |
|-------------------|------------------------|
| Features          | • High Heat Resistance |
| Forms             | • Pellets              |
| Processing Method | • Injection Molding    |

| Physical                                                            | Nominal Value (English) | Nominal Value (SI) | Test Method |
|---------------------------------------------------------------------|-------------------------|--------------------|-------------|
| Specific Gravity                                                    | 1.08                    | 1.08 g/cm³         | ASTM D792   |
| Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)                           | 1.8 g/10 min            | 1.8 g/10 min       | ASTM D1238  |
| Molding Shrinkage - Flow                                            | 6.0E-3 in/in            | 0.60 %             | ASTM D955   |
| Mechanical                                                          | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Tensile Strength (Yield, 73°F (23°C))                               | 7110 psi                | 49.0 MPa           | ASTM D638   |
| Flexural Modulus (73°F (23°C))                                      | 348000 psi              | 2400 MPa           | ASTM D790   |
| Flexural Strength (Yield, 73°F (23°C))                              | 11400 psi               | 78.5 MPa           | ASTM D790   |
| Impact                                                              | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Notched Izod Impact (73°F (23°C))                                   | 2.2 ft·lb/in            | 120 J/m            | ASTM D256   |
| Hardness                                                            | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Rockwell Hardness (R-Scale)                                         | 110                     | 110                | ASTM D785   |
| Thermal                                                             | Nominal Value (English) | Nominal Value (SI) | Test Method |
| Deflection Temperature Under Load                                   |                         |                    | ASTM D648   |
| 66 psi (0.45 MPa), Unannealed, 0.250 in (6.35 mm), Injection Molded | 257 °F                  | 125 °C             |             |
| 264 psi (1.8 MPa), Unannealed, 0.250 in (6.35 mm), Injection Molded | 234 °F                  | 112 °C             |             |
| Vicat Softening Temperature                                         | 261 °F                  | 127 °C             | ISO 306/B   |

Notes

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