

## Technical Data Sheet

### *Polyman* SAN29/10K3005GRY69770 SC



Styrene Acrylonitrile

#### Product Description

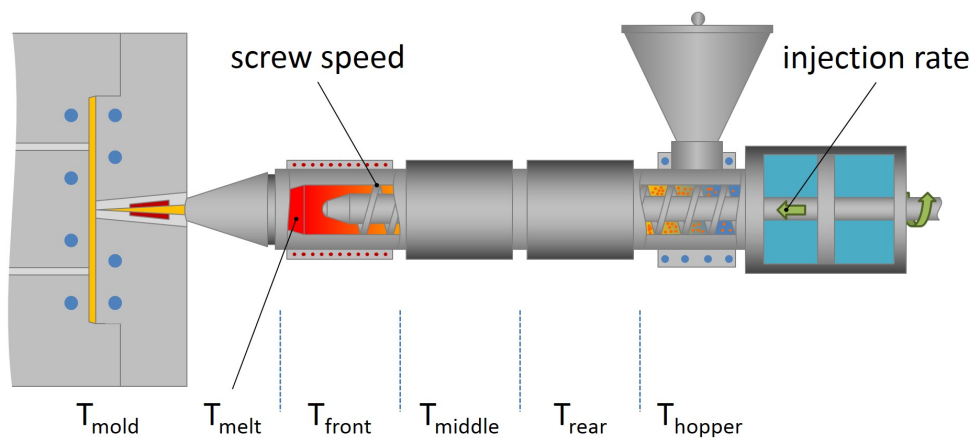
Good flow SAN grade with high chemical resistance

#### Regulatory Status

For regulatory compliance information, see *Polyman* SAN29/10K3005GRY69770 SC [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

|                   |                                                         |
|-------------------|---------------------------------------------------------|
| Status            | Commercial: Active                                      |
| Availability      | Africa-Middle East; Asia-Pacific; Europe; Latin America |
| Processing Method | Injection Molding                                       |
| Attribute         | Good Chemical Resistance; Good Flow                     |
| Resin ID          | SAN                                                     |

| Typical Properties                                                   | Nominal Value | Units                   | Test Method |
|----------------------------------------------------------------------|---------------|-------------------------|-------------|
| <b>Physical</b>                                                      |               |                         |             |
| Melt Volume Flow Rate, (230 °C/3.8 kg)                               | 10            | cm <sup>3</sup> /10 min | ISO 1133    |
| Density, (Method A)                                                  | 1.08          | g/cm <sup>3</sup>       | ISO 1183    |
| <b>Mechanical</b>                                                    |               |                         |             |
| Tensile Strain at Break, (Type 1A, 5 mm/min)                         | 3.0           | %                       | ISO 527-2   |
| Tensile Stress at Break, (Type 1A, 5 mm/min)                         | 70.0          | MPa                     | ISO 527-2   |
| Tensile Modulus, (1 mm/min, Type 1A)                                 | 3700          | MPa                     | ISO 527-1   |
| <b>Impact</b>                                                        |               |                         |             |
| Charpy Impact Strength - Notched, (23 °C, Type 1, Edgewise, Notch A) | 3.0           | kJ/m <sup>2</sup>       | ISO 179     |
| Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)        | 17            | kJ/m <sup>2</sup>       | ISO 179     |
| <b>Hardness</b>                                                      |               |                         |             |
| Ball Indentation Hardness, (H 358/30)                                | 171           | MPa                     | ISO 2039-1  |
| <b>Thermal</b>                                                       |               |                         |             |
| Vicat Softening Temperature                                          |               |                         |             |
| (B (50N), 50 °C/h)                                                   | 102           | °C                      | ISO 306     |
| (A (10N), 50 °C/h)                                                   | 106           | °C                      | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)  | 103           | °C                      | ISO 75-2/B  |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)  | 100           | °C                      | ISO 75-2/A  |



| Injection Parameters   | Nominal Value | Units  |
|------------------------|---------------|--------|
| Nozzle Temperature     | 240 to 260    | °C     |
| Screw Speed            | <600          | mm/sec |
| Processing (Melt) Temp | 220 to 250    | °C     |
| Front Temperature      | 240 to 250    | °C     |
| Holding Pressure       | 30.0 to 90.0  | MPa    |
| Middle Temperature     | 210 to 230    | °C     |
| Rear Temperature       | 180 to 200    | °C     |
| Injection Rate         | Moderate-Fast |        |
| Back Pressure          | 5.00 to 15.0  | MPa    |
| Mold Temperature       | 50 to 80      | °C     |
| Injection Pressure     | 100 to 150    | MPa    |

## Notes

These are typical property values not to be construed as specification limits.

## Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

## Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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