# apigo® 9160 NL/90

## Thermoplastic Polyolefin Elastomer

#### API SpA

#### Message:

Specific Gravity

apigo® 9160 NL/90 is a polyolefin thermoplastic elastomer (TPO (POE)) product. It can be processed by extrusion or injection molding and is available in Europe. apigo® 9160 NL/90 applications include consumer goods, electrical appliances, engineering/industrial accessories, home applications and construction applications.

Features include: chemical resistance high liquidity environmental protection/green Good processability Rapid Prototyping Cycle

| General Information             |  |      |             |  |      |                                 |  |  |  |
|---------------------------------|--|------|-------------|--|------|---------------------------------|--|--|--|
| Features                        | Recyclable materials   |      |             |  |      |                                 |  |  |  |
|                                 | Workability, good  Fast molding cycle  Good flexibility  High liquidity  Low temperature resistance  Good chemical resistance  alkali resistance |      |             |  |      |                                 |  |  |  |
|                                 |  |      |             |  |      | acid resistance                 |  |  |  |
|                                 |  |      |             |  |      |                                 |  |  |  |
|                                 |  |      |             |  | Uses | overmolding                     |  |  |  |
|                                 |  |      |             |  |      | Electrical appliances           |  |  |  |
|                                 |  |      |             |  |      | Household goods                 |  |  |  |
|                                 |  |      |             |  |      | Architectural application field |  |  |  |
| Application in Automobile Field |  |      |             |  |      |                                 |  |  |  |
| Sporting goods                  |  |      |             |  |      |                                 |  |  |  |
| Toys                            |  |      |             |  |      |                                 |  |  |  |
| Footwear                        |  |      |             |  |      |                                 |  |  |  |
|                                 |  |      |             |  |      |                                 |  |  |  |
| Appearance                      | Opacity  |      |             |  |      |                                 |  |  |  |
|                                 | Available colors   |      |             |  |      |                                 |  |  |  |
| Forms                           | Particle   |      |             |  |      |                                 |  |  |  |
| Processing Method               | Extrusion  |      |             |  |      |                                 |  |  |  |
|                                 | Injection molding  |      |             |  |      |                                 |  |  |  |
|                                 |  |      |             |  |      |                                 |  |  |  |
| Physical                        | Nominal Value  | Unit | Test Method |  |      |                                 |  |  |  |

1.09

g/cm³

ASTM D792

| Melt Mass-Flow Rate (MFR) (190°C/5.0 kg)   | 45                         | g/10 min | ASTM D1238  |
|--|----------------------------|----------|-------------|
| Hardness                                   | Nominal Value              | Unit     | Test Method |
| Durometer Hardness (Shore A, 15 sec)       | 90                         |          | ASTM D2240  |
| Mechanical                                 | Nominal Value              | Unit     | Test Method |
| Tensile Strength                           |                            |          | ASTM D638   |
|  | 7.00                       | MPa      | ASTM D638   |
| 100% strain                                | 3.20                       | MPa      | ASTM D638   |
| 300% strain                                | 4.20                       | MPa      | ASTM D638   |
| Tensile Elongation (Break)                 | 550                        | %        | ASTM D638   |
| Elastomers                                 | Nominal Value              | Unit     | Test Method |
| Tear Strength <sup>1</sup>                 | 43.0                       | kN/m     | ASTM D624   |
| Injection                                  | Nominal Value              | Unit     |             |
| Rear Temperature                           | 150 - 170                  | °C       |             |
| Middle Temperature                         | 160 - 180                  | °C       |             |
| Front Temperature                          | 170 - 190                  | °C       |             |
| Nozzle Temperature                         | 180 - 200                  | °C       |             |
| Injection Rate                             | Slow-Moderate              |          |             |
| Injection instructions                     |                            |          |             |
| Injection Pressure: HighBack Pressure: Med | diumLocking Pressure: High |          |             |
| Extrusion                                  | Nominal Value              | Unit     |             |
| Cylinder Zone 1 Temp.                      | 150 - 180                  | °C       |             |
| Cylinder Zone 2 Temp.                      | 160 - 190                  | °C       |             |
| Cylinder Zone 3 Temp.                      | 170 - 190                  | °C       |             |
| Cylinder Zone 4 Temp.                      | 180 - 190                  | °C       |             |
| Extrusion instructions                     |                            |          |             |
| L/D Ratio: >20:1Compression Ratio: 1:2.5 t | o 1:3                      |          |             |
| NOTE                                       |                            |          |             |
|  |                            |          |             |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Without Notch

## Recommended distributors for this material

# Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

1.

Phone: +86 13424755533 Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

