# apigo® CA 150

### Thermoplastic Polyolefin Elastomer

API SpA

#### Message:

apigo ® CA 150 is a polyolefin thermoplastic elastomer (TPO (POE)) product. It can be processed by extrusion or injection molding and is available in Europe. apigo ® CA 150 applications include consumer goods, electrical appliances, home applications, construction applications and the automotive industry. Features include:

chemical resistance environmental protection/green Good processability Rapid Prototyping Cycle low temperature resistance

| General Information   |                                 |          |             |  |
|---|---------------------------------|----------|-------------|--|
| Features  | Stress whitening                |          |             |  |
|   | Recyclable materials            |          |             |  |
|   | Workability, good               |          |             |  |
|   | Fast molding cycle              |          |             |  |
|   | Good coloring                   |          |             |  |
|   | Low temperature resistance      |          |             |  |
|   | Good chemical resistance        |          |             |  |
|   | alkali resistance               |          |             |  |
|   | acid resistance                 |          |             |  |
|   |                                 |          |             |  |
| Uses  | Electrical appliances           |          |             |  |
|   | Household goods                 |          |             |  |
|   | Architectural application field |          |             |  |
|   | Application in Automobile Field |          |             |  |
|   | Sporting goods                  |          |             |  |
|   | Toys                            |          |             |  |
|   | Footwear                        |          |             |  |
|   |                                 |          |             |  |
| Appearance  | Available colors                |          |             |  |
| Forms   | Particle                        |          |             |  |
| Processing Method   | Extrusion                       |          |             |  |
|   | Injection molding               |          |             |  |
|   |                                 |          |             |  |
| Physical  | Nominal Value                   | Unit     | Test Method |  |
| Specific Gravity  | 0.880                           | g/cm³    | ASTM D792   |  |
| Melt Mass-Flow Rate (MFR) (230°C/2.16<br>kg)  | 9.0                             | g/10 min | ASTM D1238  |  |
| Hardness  | Nominal Value                   | Unit     | Test Method |  |
| Fighter the second se |                                 | Unit     |             |  |

| Durometer Hardness (Shore D, 3 sec)       | 44                          |      | ASTM D2240  |
|---|-----------------------------|------|-------------|
| Mechanical                                | Nominal Value               | Unit | Test Method |
| Tensile Strength                          |                             |      | ASTM D638   |
|   | 15.0                        | MPa  | ASTM D638   |
| 100% strain                               | 8.70                        | MPa  | ASTM D638   |
| 300% strain                               | 8.90                        | MPa  | ASTM D638   |
| Tensile Elongation (Break)                | 690                         | %    | ASTM D638   |
| Flexural Modulus (23°C)                   | 150                         | MPa  | ASTM D790   |
| Elastomers                                | Nominal Value               | Unit | Test Method |
| Tear Strength <sup>1</sup>                | 90.0                        | kN/m | ASTM D624   |
| Impact                                    | Nominal Value               | Unit | Test Method |
| Notched Izod Impact                       |                             |      | ASTM D256   |
| -20°C                                     | No Break                    |      | ASTM D256   |
| 23°C                                      | No Break                    |      | ASTM D256   |
| Injection                                 | Nominal Value               | Unit |             |
| Rear Temperature                          | 150 - 170                   | °C   |             |
| Middle Temperature                        | 160 - 180                   | °C   |             |
| Front Temperature                         | 170 - 190                   | °C   |             |
| Nozzle Temperature                        | 180 - 200                   | °C   |             |
| Mold Temperature                          | 20.0 - 60.0                 | °C   |             |
| Injection Rate                            | Slow-Moderate               |      |             |
| Injection instructions                    |                             |      |             |
| Injection Pressure: HighBack Pressure: Me | ediumLocking 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  | to 1:3                      |      |             |
| NOTE                                      |                             |      |             |
| 1.  | Without Notch               |      |             |
|   |                             |      |             |

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.

#### Recommended distributors for this material

## Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

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

