

# apinat® A 85

Thermoplastic Elastomer

API SpA

## Message:

apinat® A 85 is a thermoplastic elastomer (TPE) product. It can be processed by extrusion or injection molding and is available in Europe. Typical application areas are: engineering/industrial accessories.

Features include:  
environmental protection/green  
good weather resistance

| General Information                  |                         |                   |             |
|--------------------------------------|-------------------------|-------------------|-------------|
| Features                             | Good weather resistance |                   |             |
|                                      | Biodegradable           |                   |             |
| Uses                                 | overmolding             |                   |             |
| Agency Ratings                       | EN 13432                |                   |             |
|                                      | EN 14046                |                   |             |
|                                      | ISO 14855               |                   |             |
| Appearance                           | Natural color           |                   |             |
| Processing Method                    | Extrusion               |                   |             |
|                                      | Injection molding       |                   |             |
| Physical                             | Nominal Value           | Unit              | Test Method |
| Specific Gravity                     | 1.20                    | g/cm <sup>3</sup> | ASTM D792   |
| Hardness                             | Nominal Value           | Unit              | Test Method |
| Durometer Hardness                   |                         |                   | ASTM D2240  |
| Shaw A, 15 seconds                   | 83                      |                   | ASTM D2240  |
| Shaw D, 3 seconds                    | 35                      |                   | ASTM D2240  |
| Mechanical                           | Nominal Value           | Unit              | Test Method |
| Tensile Strength                     |                         |                   | ASTM D638   |
| --                                   | 14.0                    | MPa               | ASTM D638   |
| 100% strain                          | 4.50                    | MPa               | ASTM D638   |
| 300% strain                          | 7.00                    | MPa               | ASTM D638   |
| Tensile Elongation (Break)           | 700                     | %                 | ASTM D638   |
| Abrasion Resistance                  | 130                     | mm <sup>3</sup>   | DIN 53516   |
| Ozone Resistance <sup>1</sup> (40°C) | Good                    |                   |             |
| Elastomers                           | Nominal Value           | Unit              | Test Method |
| Tear Strength                        | 75.0                    | kN/m              | ASTM D624   |
| Injection                            | Nominal Value           | Unit              |             |
| Drying Temperature                   | 80.0                    | °C                |             |

|                        |               |    |
|------------------------|---------------|----|
| Drying Time            | 2.0           | hr |
| Suggested Max Moisture | 0.10          | %  |
| Rear Temperature       | 120 - 140     | °C |
| Middle Temperature     | 130 - 150     | °C |
| Front Temperature      | 140 - 160     | °C |
| Nozzle Temperature     | 150 - 170     | °C |
| Mold Temperature       | 25.0 - 35.0   | °C |
| Injection Rate         | Moderate-Fast |    |

#### Injection instructions

Injection Pressure: Medium Back Pressure: Low to Medium

| Extrusion              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     | 80.0          | °C   |
| Drying Time            | 2.0           | hr   |
| Suggested Max Moisture | 0.10          | %    |
| Cylinder Zone 1 Temp.  | 110 - 130     | °C   |
| Cylinder Zone 2 Temp.  | 130 - 140     | °C   |
| Cylinder Zone 3 Temp.  | 135 - 145     | °C   |
| Cylinder Zone 4 Temp.  | 140 - 150     | °C   |
| Die Temperature        | 140 - 150     | °C   |

#### Extrusion instructions

L/D Ratio: >20 Compression Ratio: 1:2.5

#### NOTE

1. 72 hr, 200 ppcm, Tension = 20%

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



WECHAT