apilon 52® ESC 64

Thermoplastic Polyurethane Elastomer (Polyester)

API SpA

Message:

Specific Gravity

apilon 52®ESC 64 is a thermoplastic polyurethane elastomer (polyester)(TPU-polyester) product. It can be processed by extrusion or injection molding and is available in Europe. apilon 52®The application areas of ESC 64 include engineering/industrial accessories, electrical/electronic applications, electrical appliances, tools and home applications.

Features include: environmental protection/green Good UV resistance low temperature resistance chemical resistance Wear-resistant

| General Information | | | | | | | | | | | |
|------------------------------------|---|------|-------------|--|--|------|----------------------|--|--|--|--|
| Features | Antimicrobial | | | | | | | | | | |
| | Good UV resistance Recyclable materials Good wear resistance Low temperature resistance Heat resistance, high Hydrolysis resistance | | | | | | | | | | |
| | | | | | | | Oil resistance | | | | |
| | | | | | | | | | | | |
| | | | | | | Uses | Handle | | | | |
| | | | | | | | Wheels | | | | |
| | | | | | | | Conveyor belt repair | | | | |
| Electrical/Electronic Applications | | | | | | | | | | | |
| Electrical appliances | | | | | | | | | | | |
| Washer | | | | | | | | | | | |
| Power/other tools | | | | | | | | | | | |
| Pipe fittings | | | | | | | | | | | |
| Household goods | | | | | | | | | | | |
| Sporting goods | | | | | | | | | | | |
| Coating application | | | | | | | | | | | |
| Footwear | | | | | | | | | | | |
| Forms | Particle | | | | | | | | | | |
| Processing Method | Extrusion | | | | | | | | | | |
| | Injection molding | | | | | | | | | | |
| | , | | | | | | | | | | |
| Physical | Nominal Value | Unit | Test Method | | | | | | | | |
| | | | | | | | | | | | |

g/cm³

ASTM D792

1.21

| Durometer Hardness (Shore D. 3 sec) 64 Image: Common Com | Hardness | Nominal Value | Unit | Test Method |
|---|---|---------------|-------|--------------|
| Mechanical Nominal Value Unit Test Method Tensile Strength 40.0 MPa ASTM D638 40.0 MPa ASTM D638 100% strain 18.0 MPa ASTM D638 100% strain 30.0 MPa ASTM D638 Tensile Elongation (Break) 40.0 % ASTM D638 Abrasion Resistance 30.0 mm³ DIN 53516 Elastomers Nominal Value Unit Test Method Tera Strength³ 190 Morninal Value Unit Test Method Notched Ized Impact (-20°C) No Break Unit Test Method Notched Ized Impact (-20°C) No Break Unit Test Method Notched Ized Impact (-20°C) No Break Unit Test Method Note Heart (-20°C) No Break Unit Test Method Notagested Max Moisture 0.0 No Break C Rear Temperature 180 - 190 "C Test Method Injection Pressure 190 - 215 "C | | | | |
| 400 MPa ASTM D638 100% strain 18.0 MPa ASTM D638 100% strain 20.0 MPa ASTM D638 100% strain 20.0 MPa ASTM D638 100% strain 20.0 MPa ASTM D638 1008 MPa ASTM D638 1008 MPa ASTM D638 1008 MPa ASTM D638 1008 MPa ASTM D638 1009 MPa ASTM D638 | Mechanical | Nominal Value | Unit | Test Method |
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| 300% strain 30.0 MPa ASTM D638 Tensile Elongation (Break) 400 % ASTM D638 Abrasion Resistance 30.0 mm³ DIN 53516 Elastomers Nominal Value Unit Test Method Tear Strength ¹ 190 MV/m ASTM D624 Impact Nominal Value Unit Test Method Noched lzod Impact (-20°C) No Break STM D256 Injection Nominal Value Unit Unit Drying Temperature 80.0 - 110 *C Suggested Max Moisture 0.070 % Rear Temperature 180 - 190 *C Middle Temperature 180 - 190 *C Nozzle Temperature 180 - 190 *C Nozzle Temperature 180 - 20 *C Injection Pressure 500 - 100 MPa Injection Rate 500 - 100 MPa Injection Instructions 500 - 100 MPa Back Pressure: Medium to LowLocking Pressure: High *C Estrusion </td <td>-</td> <td>40.0</td> <td>MPa</td> <td>ASTM D638</td> | - | 40.0 | MPa | ASTM D638 |
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| Die Temperature 170 - 210 °C Extrusion instructions L/D Ratio: 20:1 to 30:1Compression Ratio: 1:2.5 to 1:3 NOTE | Cylinder Zone 3 Temp. | 175 - 210 | °C | |
| Extrusion instructions L/D Ratio: 20:1 to 30:1Compression Ratio: 1:2.5 to 1:3 NOTE | Cylinder Zone 4 Temp. | 180 - 220 | °C | |
| L/D Ratio: 20:1 to 30:1Compression Ratio: 1:2.5 to 1:3 NOTE | Die Temperature | 170 - 210 | °C | |
| NOTE | Extrusion instructions | | | |
| | L/D Ratio: 20:1 to 30:1Compression Ratio: | 1:2.5 to 1:3 | | |
| 1. Without Notch | NOTE | | | |
| | 1. | Without Notch | | |

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