

## TECHNICAL DATA SHEET PEBAX® 5533 SA 01

### POLYETHER BLOCK AMIDE PELLET

PEBAX® 5533 SA 01 is a polyether block amide, a thermoplastic elastomer made of flexible polyether and rigid polyamide. This SA grade offers the highest quality. It is used in sport and consumer applications, especially when food contact compliance is requested.

#### DESIGNATION

PEBA

#### MAIN APPLICATIONS

- Footwear - Outsole/Components
- Industry - Distribution

#### DELIVERY FORM

- Pellets

#### TRANSFORMATION PROCESSES

- Extrusion - General
- Film Extrusion
- Injection Molding
- Tube Extrusion

### RHEOLOGICAL PROPERTIES

| プロパティ                       | 価値    | テスト基準     |
|-----------------------------|-------|-----------|
| Shrinkage, Parallel (t+24h) | 0.8 % | ISO 294-4 |
| Shrinkage, Normal (t+24h)   | 1.0 % | ISO 294-4 |

### MECHANICAL PROPERTIES

| プロパティ   | DRY / COND VALUE*      | テスト基準        |
|---|------------------------|--------------|
| Hardness, Shore D, 15 s                         | - / 50                 | ISO 868      |
| Charpy unnotched impact strength, 23°C (73°F)   | - / No Break           | ISO 179 1eU  |
| Charpy unnotched impact strength, -30°C (-22°F) | - / No Break           | ISO 179 1eU  |
| Nominal strain at break, 23°C (73°F), 50 mm/min | > 450 / > 450 %        | ISO 527-1/-2 |
| Yield strain, 23°C (73°F), 50 mm/min            | 25 / 25 %              | ISO 527-1/-2 |
| Yield stress, 23°C (73°F), 50 mm/min            | 12 / 12 MPa            | ISO 527-1/-2 |
| Tensile modulus, 23°C (73°F), 1 mm/min          | 170 / 161 MPa          | ISO 527-1/-2 |
| Charpy notched impact strength, 23°C (73°F)     | No Break / No Break    | ISO 179 1eA  |
| Charpy notched impact strength, -30°C (-22°F)   | No Break / No Break    | ISO 179 1eA  |
| Flexural modulus, 23°C (73°F)                   | - / 170 MPa            | ISO 178      |
| Stress at break, 23°C (73°F), 50 mm/min         | - / 52 MPa             | ISO 527-1/-2 |
| Abrasion resistance                             | 47 / - mm <sup>3</sup> | ISO 4649     |

\*DRY: Dry As Molded (DAM) if pellet / Dry if powder.  
COND: Conditionned.

# PEBAX® 5533 SA 01

## THERMAL PROPERTIES

| プロパティ                                      | 価値     | テスト基準          |
|--|--------|----------------|
| Vicat softening temperature, 50N at 50°C/h | 66 °C  | ISO 306        |
| Melting temperature, 10°C/min              | 159 °C | ISO 11357-1/-3 |

## OTHER PROPERTIES

| プロパティ  | 価値                     | テスト基準      |
|--|------------------------|------------|
| Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR | 0.6 %                  | ISO 62     |
| Water absorption, 23°C(73°F), immersion, equilibrium       | 1.2 %                  | ISO 62     |
| Specific gravity, 23°C (73°F)                              | 1.01 g/cm <sup>3</sup> | ISO 1183-1 |

## 包装

This grade is delivered dried in sealed packaging ready to be processed. Available packaging:

- 20 kg / 44 lb bags

## 賞味期限

Two years from the date of delivery, when stored properly (sealed bags, appropriate moisture, UV protection and temperature). For any use above this limit, please refer to our technical services.

## PROCESSING CONDITIONS:

- 典型的な熔融温度 (最小 / 推奨 / 最大) - 射出成形: 210°C / 240°C / 270°C (410°F / 430°F / 520°F)
- 典型的な金型温度 - 射出成形: 20-60°C (70-140°F)
- Drying time and temperature: 65-75°C (150-165°F) / 4-6 hours

## REGIONAL AVAILABILITY

Asia Pacific, Europe, Latin America and the Caribbean, Middle East, Northern America

**Headquarter: Arkema France**  
420, rue d'Estienne d'Orves  
92705 Colombes Cedex – France  
T +33 (0)1 49 00 80 80

Disclaimer - Please consult Arkema's disclaimer regarding the use of Arkema's products on <https://www.arkema.com/global/en/products/product-safety/disclaimer/> which is incorporated herein by reference and made a part hereof.

Arkema France, a French société anonyme registered at the Trade and Companies Register of Nanterre under the number 319 632 790

[arkema.com](https://www.arkema.com)

**ARKEMA**