

## TECHNICAL DATA SHEET

# PEBAX® 5533 SN 70 BLACK

## POLYETHER BLOCK AMIDE PELLET

PEBAX® 5533 SN 70 BLACK is a polyether block amide, a thermoplastic elastomer made of flexible polyether and rigid polyamide. This black colored grade offers the highest quality and electrostatic discharge (ESD) performance. It is used in sport and consumer applications, especially when conductivity is required.

### DESIGNATION

PEBA

### DELIVERY FORM

- Pellets

### TRANSFORMATION PROCESSES

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

## RHEOLOGICAL PROPERTIES

속성	값	테스트 표준
Melt volume flow rate (MVR), 250°C / 5kg (482°F / 11 lb)	5 cm <sup>3</sup> /10min	ISO 1133

## MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Flexural modulus, 23°C (73°F)	- / 310 MPa	ISO 178
Tensile modulus, 23°C (73°F), 1 mm/min	305 / 298 MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	31 / 36 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	18 / 17 MPa	ISO 527-1/-2
Stress at break, 23°C (73°F), 50 mm/min	- / 29 MPa	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	> 50 / > 50 %	ISO 527-1/-2
Hardness, Shore D, 15 s	- / 60	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
Charpy notched impact strength, 23°C (73°F)	No Break / No Break	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 18 kJ/m <sup>2</sup>	ISO 179 1eA

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

속성	값	테스트 표준
Melting temperature, 10°C/min	159 °C	ISO 11357-1/-3

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## THERMAL PROPERTIES/ELECTRICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Surface resistivity, 23°C (73,4°F)	- / 5500 ohm/sq	IEC 62631-3-2
Volumic (transversal) resistivity, 23°C (73,4°F)	- / 1.1E+5 ohm/m	IEC 62631-3-1

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

## OTHER PROPERTIES

속성	값	테스트 표준
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	0.5 %	ISO 62
Water absorption, 23°C (73°F), immersion, equilibrium	1.2 %	ISO 62
Specific gravity, 23°C (73°F)	1.09 g/cm³	ISO 1183-1

## PACKAGING

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

- 21 kg / 44 lb bags

## SHELF LIFE

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.

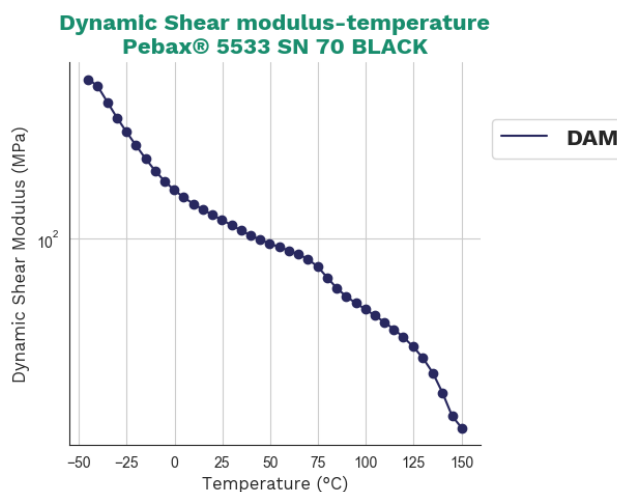
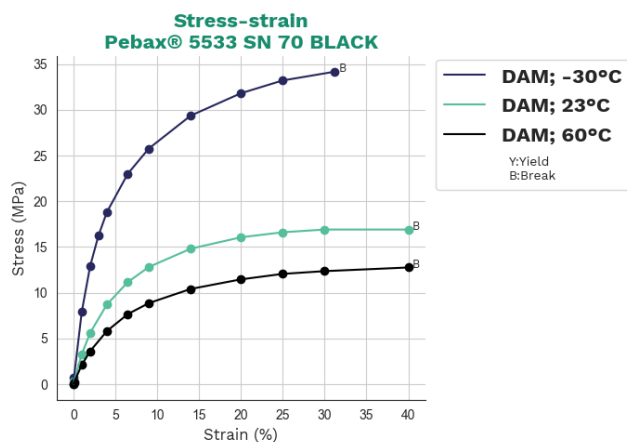
## PROCESSING CONDITIONS:

- Typical melt temperature (Min / Recommended / Max) - Injection Molding: 210°C / 240°C / 270°C (410°F / 430°F / 520°F)
- Typical mold temperature - Injection molding: 20-60°C (70-140°F)
- Drying time and temperature: 65-75°C (150-165°F) / 4-6 hours

## SPECIAL CHARACTERISTICS

- Electrostatic discharge (ESD)

## DIAGRAMS



# PEBAX® 5533 SN 70 BLACK

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