

## TECHNICAL DATA SHEET

# RILSAMID® AESN BLACK P401 TL

## POLYAMIDE 12 PELLET

RILSAMID® AESN BLACK P401 TL is a polyamide 12 compound. This plasticized an impact-modified grade is designed for tube extrusion. It is a market standard to produce air brake tubing (HIPHL) lines.

Designation : ISO 16396 - PA12-IP, EG1HL, C22-004

### DESIGNATION

PA12-IP

### DELIVERY FORM

- Pellets

### TRANSFORMATION PROCESSES

- Extrusion - General
- Tube Extrusion

### ADDITIVES

- Heat Stabilized
- Light Stabilized

## RHEOLOGICAL PROPERTIES

속성	값	테스트 표준
Melt volume flow rate (MVR), 235°C / 5 kg (455°F / 11 lb)	13 cm <sup>3</sup> /10min	ISO 1133

## MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Tensile modulus, 23°C (73°F), 1 mm/min	- / 360 MPa	ISO 527-1/-2
Stress at 50% strain, 23°C (73°F), 50 mm/min	- / 24 MPa	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	- / > 50 %	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	- / 330 MPa	ISO 178
Charpy unnotched impact strength, 23°C (73°F)	No break / No break	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	No break / No break	ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	/ No break kJ/m <sup>2</sup>	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	/ 8 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	174 °C	ISO 11357-1/-3

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## OTHER PROPERTIES

속성	값	테스트 표준
Specific gravity, 23°C (73°F)	1.03 g/cm <sup>3</sup>	ISO 1183-1
Water absorption, 23°C (73°F), immersion, equilibrium	1.2 %	ISO 62

## PACKAGING

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

- 21 kg / 44 lb bags
- 455 kg / 1000 lb rigid containers

## 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: 230°C / 250°C / 270°C (445°F / 480°F / 520°F)
- Typical mold temperature - Injection molding: 20-60°C (70-140°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

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

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