

## TECHNICAL DATA SHEET

# RILSAN® TIEFLEX S452 NAT T6L

## POLYAMIDE ALLOY PELLET

RILSAN® TIEFLEX S452 NAT T6L is a polyamide alloy. It is partially produced from a renewable & sustainable source (castor oil). This grade is designed for multilayer automotive and trucks fuel lines (structural tie layer).

### DESIGNATION

PA\*

### DELIVERY FORM

- Pellets

### TRANSFORMATION PROCESSES

- Extrusion - General
- Tube Extrusion

### ADDITIVES

- Heat Stabilized
- Light Stabilized
- Plasticizer

## RHEOLOGICAL PROPERTIES

속성	값	테스트 표준
Melt volume flow rate (MVR), 235°C / 5 kg (455°F / 11 lb)	3.7 cm <sup>3</sup> /10min	ISO 1133

## MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Tensile modulus, 23°C (73°F), 1 mm/min	685 / 515 MPa	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 33 MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	- / 31 %	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	- / 25 %	ISO 527-1/-2
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)	- / 95 kJ/m <sup>2</sup>	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	- / 6.5 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	217 °C	ISO 11357-1/-3

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## OTHER PROPERTIES

속성	값	테스트 표준
Specific gravity, 23°C (73°F)	1.09 g/cm <sup>3</sup>	ISO 1183-1
Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR	1.2 %	ISO 62
Water absorption, 23°C (73°F), immersion, equilibrium	2.9 %	ISO 62

## PACKAGING

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

- 26 kg / 55 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: 250°C / 270°C / 290°C (480°F / 520°F / 555°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

## SPECIAL CHARACTERISTICS

- Bio-based

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