

## TECHNICAL DATA SHEET

# RILSAN® TIEFLEX S442 NAT TL

## POLYAMIDE ALLOY PELLET

RILSAN® TIEFLEX S442 NAT TL 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 (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)	4.6 cm <sup>3</sup> /10min	ISO 1133

## MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Tensile modulus, 23°C (73°F), 1 mm/min	600 / - MPa	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	- / 31 MPa	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	- / 40 %	ISO 527-1/-2
Nominal strain at break, 23°C (73°F), 50 mm/min	- / > 50 %	ISO 527-1/-2

\*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

## OTHER PROPERTIES

속성	값	테스트 표준
Specific gravity, 23°C (73°F)	1.06 g/cm <sup>3</sup>	ISO 1183-1

## PACKAGING

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

- 26 kg / 55 lb bags

# RILSAN® TIEFLEX S442 NAT TL

## 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

**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**