

## TECHNICAL DATA SHEET

# RILSAN® BESVO A MED

## POLYAMIDE 11 PELLET

RILSAN® BESVO A FDA is a polyamide 11 resin. It is produced from a renewable & sustainable source (castor oil). This natural grade is designed for tube extrusion. It contains a negligible amount of oligomers and is approved in medical applications. Upon request, letters regarding USP Class VI compliance can be provided.

Type : ISO 16396 - PA11, E, C22-010

### DESIGNATION

PA11

### MAIN APPLICATIONS

- Health - Reusable - Others
- Health - Consumable - Others
- Health - Consumable - Catheters

### DELIVERY FORM

- Pellets

### TRANSFORMATION PROCESSES

- Extrusion - General
- Tube Extrusion

## RHEOLOGICAL PROPERTIES

| プロパティ                                                     | 価値  | UNIT      | テスト基準     |
|-----------------------------------------------------------|-----|-----------|-----------|
| Shrinkage, Parallel (t+24h)                               | 1.1 | %         | ISO 294-4 |
| Shrinkage, Normal (t+24h)                                 | 1.1 | %         | ISO 294-4 |
| Melt volume flow rate (MVR), 235°C / 10kg (455°F / 22 lb) | 6   | cm³/10min | ISO 1133  |

## MECHANICAL PROPERTIES

| プロパティ                                           | DRY / COND VALUE* | UNIT  | テスト基準        |
|-------------------------------------------------|-------------------|-------|--------------|
| Flexural modulus, 23°C (73°F)                   | - / 1100          | MPa   | ISO 178      |
| Tensile modulus, 23°C (73°F), 1 mm/min          | - / 1180          | MPa   | ISO 527-1/-2 |
| Yield stress, 23°C (73°F), 50 mm/min            | - / 36            | MPa   | ISO 527-1/-2 |
| Yield strain, 23°C (73°F), 50 mm/min            | - / 5             | %     | ISO 527-1/-2 |
| Nominal strain at break, 23°C (73°F), 50 mm/min | - / > 50          | %     | ISO 527-1/-2 |
| Charpy notched impact strength, 23°C (73°F)     | - / 15            | kJ/m² | ISO 179 1eA  |
| Charpy notched impact strength, -30°C (-22°F)   | - / 13            | kJ/m² | ISO 179 1eA  |
| 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  |
| Hardness, Shore D, 15 s                         | - / 71            |       | ISO 868      |

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

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## THERMAL PROPERTIES

| プロパティ                         | 価値  | UNIT | テスト基準          |
|-------------------------------|-----|------|----------------|
| Melting temperature, 10°C/min | 186 | °C   | ISO 11357-1/-3 |

## ELECTRICAL PROPERTIES

| プロパティ                          | DRY / COND VALUE* | UNIT | テスト基準       |
|--------------------------------|-------------------|------|-------------|
| Dielectric stress, 23°C (73°F) | - / 30            |      | IEC 60243-1 |

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COND: Conditionned.

## OTHER PROPERTIES

| プロパティ                                                | 価値   | UNIT  | テスト基準      |
|------------------------------------------------------|------|-------|------------|
| Water absorption, 23°C(73°F), immersion, equilibrium | 1.9  | %     | ISO 62     |
| Specific gravity, 23°C (73°F)                        | 1.03 | g/cm³ | ISO 1183-1 |

## 包装

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

- 25 kg / 55 lb 袋

## 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:

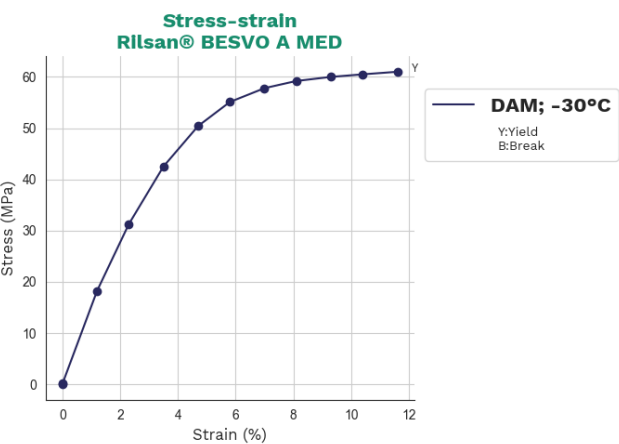
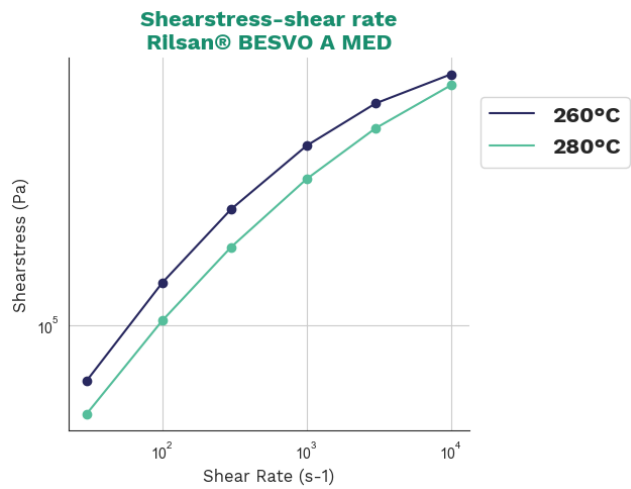
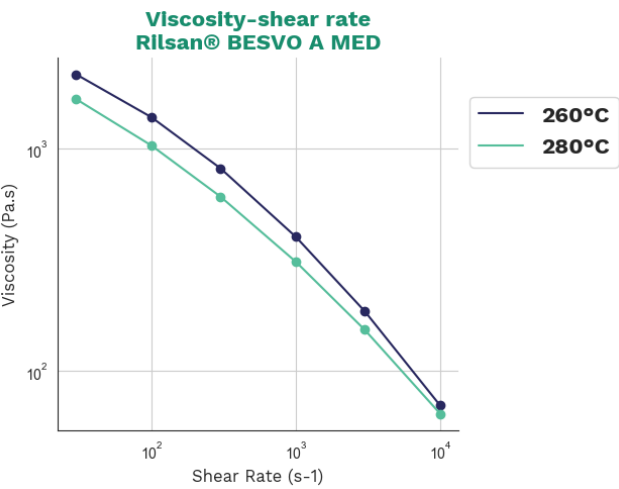
- 典型的な熔融温度 (最小 / 推奨 / 最大) - 射出成形: 230°C / 250°C / 270°C (445°F / 480°F / 520°F)
- 典型的な金型温度 - 射出成形: 20-60°C (70-140°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

## SPECIAL CHARACTERISTICS

- Bio-based
- Low oligomers

# RILSAN® BESVO A MED

## DIAGRAMS



**Headquarter: Arkema France**  
51, Esplanade du Général de Gaulle  
92800 Puteaux – France  
T +33 (0)1 49 00 80 80

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