

## TECHNICAL DATA SHEET

# RILSAN® HT CESV BLACK P010 TL

### POLYPHTALAMIDE PELLETT

RILSAN® HT CESV BLACK P010 TL is polyphthalamide compound. It is partially produced from a renewable & sustainable source (castor oil). This flexible grade with outstanding thermal & chemical resistance (incl. unique water coolant resistance) is typically used to replace metal or rubber parts in very demanding automotive fluid transfer lines.

Designation : ISO 16396 - PA10T/X-I, EG1HL, C16-010

#### DESIGNATION

PA10T/X-I

#### MAIN APPLICATIONS

- Auto - Water Cooling Circuit
- Auto - Transmission Oil Cooling Circuit
- Auto - Blow Molded Air Intake
- Auto - SCR Lines & Tanks
- Auto - Vacuum & Blow By Lines

#### DELIVERY FORM

- Pellets

#### TRANSFORMATION PROCESSES

- Blow molding
- Extrusion - General
- Tube Extrusion

#### ADDITIVES

- Heat Stabilized
- Light Stabilized

## RHEOLOGICAL PROPERTIES

| プロパティ  | 値             | テスト基準    |
|--|---------------|----------|
| Melt volume flow rate (MVR), 300°C / 5kg (572°F / 11 lb) | 1.9 cm³/10min | ISO 1133 |

## MECHANICAL PROPERTIES

| プロパティ   | DRY / COND VALUE* | テスト基準        |
|---|-------------------|--------------|
| Tensile modulus, 23°C (73°F), 1 mm/min          | 1050 / 1040 MPa   | ISO 527-1/-2 |
| Yield stress, 23°C (73°F), 50 mm/min            | 34 / 32 MPa       | ISO 527-1/-2 |
| Yield strain, 23°C (73°F), 50 mm/min            | 6.2 / 6.6 %       | ISO 527-1/-2 |
| Nominal strain at break, 23°C (73°F), 50 mm/min | > 50 / > 50 %     | ISO 527-1/-2 |
| Flexural modulus, 23°C (73°F)                   | - / 987 MPa       | ISO 178      |
| 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)     | - / 84 kJ/m²      | ISO 179 1eA  |
| Charpy notched impact strength, -30°C (-22°F)   | - / 16 kJ/m²      | ISO 179 1eA  |
| Hardness, Shore D, 15 s                         | - / 66            | ISO 868      |

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

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## THERMAL PROPERTIES

| プロパティ                                  | 価値     | テスト基準          |
|--|--------|----------------|
| Glass transition temperature, 10°C/min | 82 °C  | ISO 11357-1/-2 |
| Heat deflection temperature, 0.45 MPa  | 82 °C  | ISO 75-1/-2    |
| Heat deflection temperature, 1.8 MPa   | 66 °C  | ISO 75-1/-2    |
| Melting temperature, 10°C/min          | 260 °C | ISO 11357-1/-3 |

## OTHER PROPERTIES

| プロパティ                              | 価値                     | テスト基準      |
|------------------------------------|------------------------|------------|
| Bio-based carbon content, Measured | 48 %                   | ASTM D6866 |
| Specific gravity, 23°C (73°F)      | 1.05 g/cm <sup>3</sup> | ISO 1183-1 |

## 包装

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

- 25 kg / 55 lb bags

## 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.

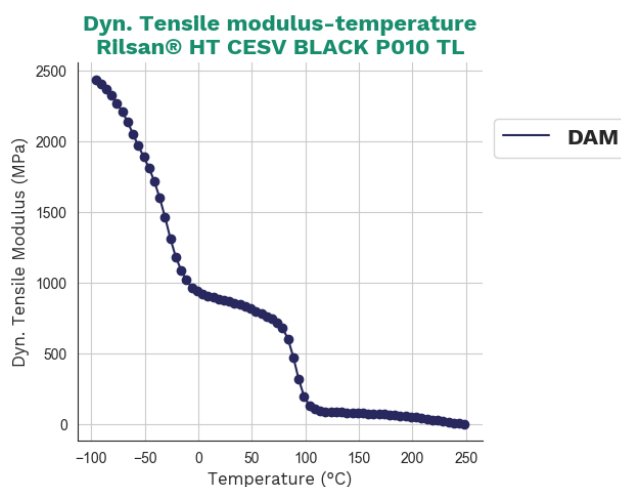
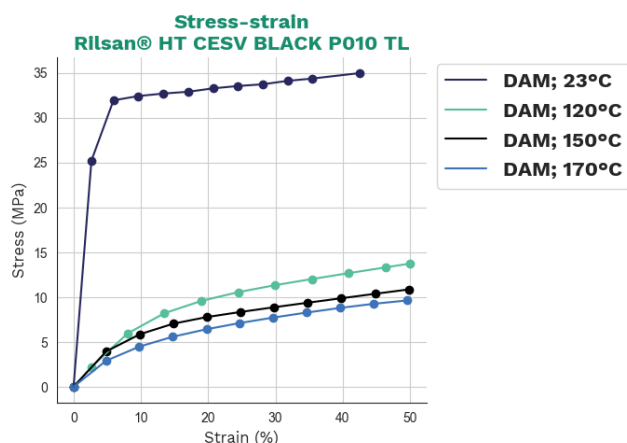
## PROCESSING CONDITIONS:

- 典型的な熔融温度 (最小 / 推奨 / 最大) - 射出成形: 270°C / 290°C / 310°C (520°F / 555°F / 590°F)
- 典型的な金型温度 - 射出成形: 90-110°C (195-230°F)
- Drying time and temperature: 100-110°C (210-230°F) / 4-8 hours

## SPECIAL CHARACTERISTICS

- Bio-based

## DIAGRAMS



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