

TECHNICAL DATA SHEET

ORGALLOY® LT 5050 T6L NAT

POLYAMIDE ALLOY PELLETT

ORGALLOY® LT 5050 T6L NAT is a polyamide alloy. This natural flexible grade is designed for extrusion to produce refrigerant barrier layer in automotive & non automotive air conditioning rubber hose.

DESIGNATION

PA*

DELIVERY FORM

- Pellets

TRANSFORMATION PROCESSES

- Calendering
- Extrusion - General
- Sheet Extrusion
- Thermoforming
- 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) | 1.8 cm ³ /10min | ISO 1133 |

MECHANICAL PROPERTIES

| 속성 | DRY / COND VALUE* | 테스트 표준 |
|---|---------------------------|--------------|
| Hardness, Shore D, 15 s | - / 55 | ISO 868 |
| 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) | 76 / 82 kJ/m ² | ISO 179 1eA |
| Charpy notched impact strength, -30°C (-22°F) | 28 / 30 kJ/m ² | ISO 179 1eA |
| Nominal strain at break, 23°C (73°F), 50 mm/min | > 50 / > 50 % | ISO 527-1/-2 |
| Stress at 50% strain, 23°C (73°F), 50 mm/min | 26 / 21 MPa | ISO 527-1/-2 |
| Tensile modulus, 23°C (73°F), 1 mm/min | - / 470 MPa | ISO 527-1/-2 |
| Flexural modulus, 23°C (73°F) | - / 330 MPa | ISO 178 |

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

| 속성 | 값 | 테스트 표준 |
|--|--------|----------------|
| Vicat softening temperature, 50N at 50°C/h | 75 °C | ISO 306 |
| Melting temperature, 10°C/min | 220 °C | ISO 11357-1/-3 |

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THERMAL PROPERTIES ELECTRICAL PROPERTIES

| 속성 | DRY / COND VALUE* | 테스트 표준 |
|--|-------------------|---------------|
| Surface resistivity, 23°C (73,4°F) | - / >1E15 ohm/sq | IEC 62631-3-2 |
| Volumic (transversal) resistivity, 23°C (73,4°F) | - / 7.4E+11 ohm/m | IEC 62631-3-1 |
| Comparative tracking index, 23°C (73,4°F) | - / 600 | IEC 60112 |
| Dielectric stress, 23°C (73,4°F) | - / 36 | IEC 60243-1 |
| Relative permittivity, 100Hz | - / 4 | IEC 60250 |
| Relative permittivity, 1Mhz | - / 4 | IEC 60250 |
| Dissipation factor, 100Hz | - / 1100 | IEC 60250 |
| Dissipation factor, 1Mhz | - / 1100 | IEC 60250 |

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

OTHER PROPERTIES

| 속성 | 값 | 테스트 표준 |
|--|------------------------|------------|
| Moisture absorption, At equilibrium at 23°C (73°F) / 50%HR | 2 % | ISO 62 |
| Water absorption, 23°C (73°F), immersion, equilibrium | 5.6 % | ISO 62 |
| Specific gravity, 23°C (73°F) | 1.04 g/cm ³ | ISO 1183-1 |

PACKAGING

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

- 26 kg / 55 lb bags

SHELF LIFE

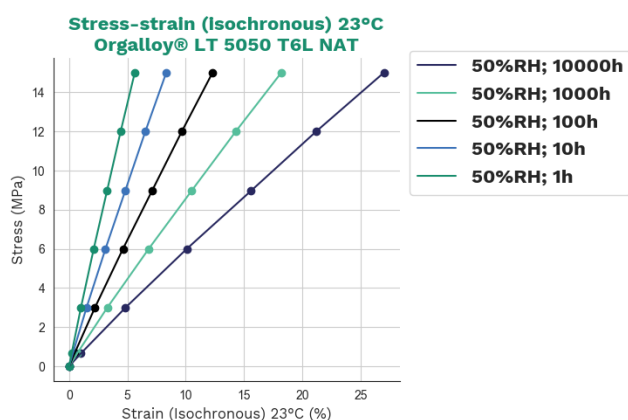
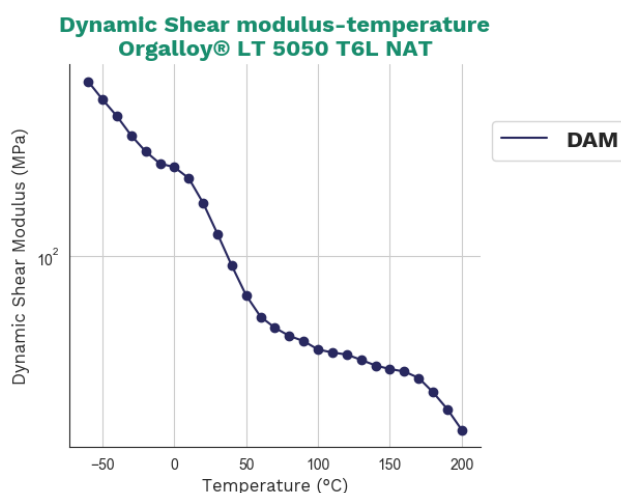
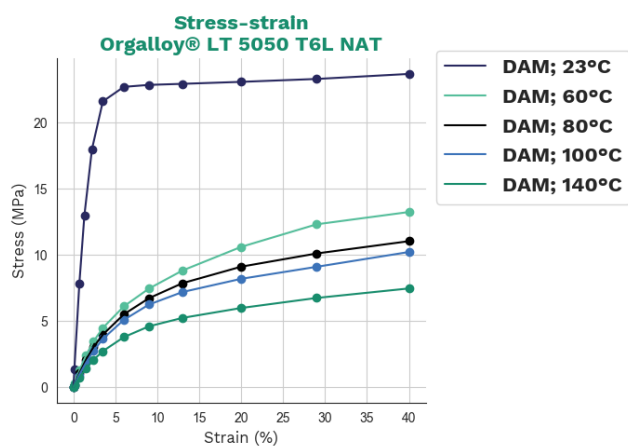
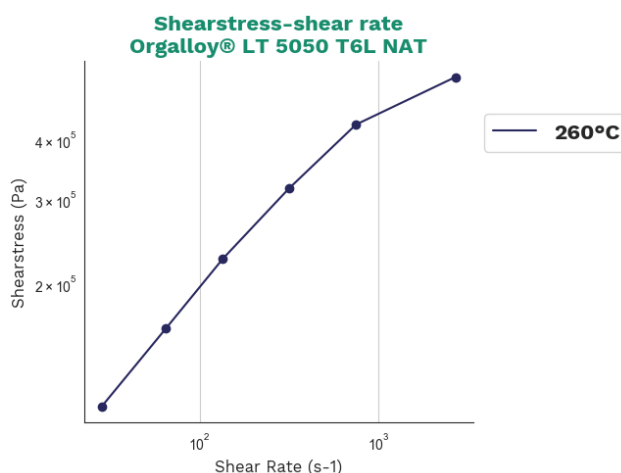
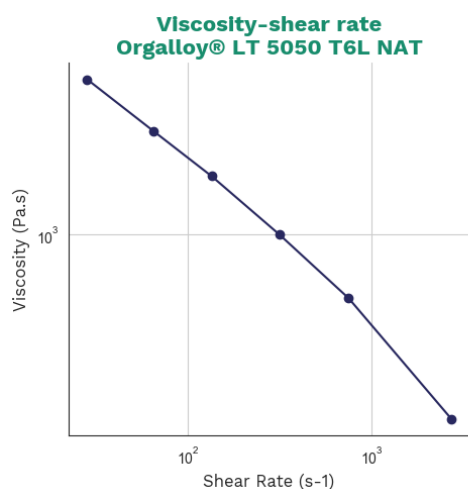
Two years from the date of delivery, when stored properly (sealed bags, appropriate moisture, UV protection and temperature). For any use above this limit, please refer to our technical services.

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

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DIAGRAMS



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