ORGALLOY®

TECHNICAL DATA SHEET

ORGALLOY® RS 6010 NAT

POLYAMIDE ALLOY PELLET

ORGALLOY® RS 6010 NAT is a polyamide alloy. This natural glass reinforced grade is designed for injection molding and offers an outstanding dimensional stability, chemical resistance to automotive fluids and is ideal for the realization of complex parts.

DESIGNATION

PA*

DELIVERY FORM

- **Pellets**

TRANSFORMATION PROCESSES

- **Injection Molding**

ADDITIVES

- **Heat Stabilized**
- **Light Stabilized**

RHEOLOGICAL PROPERTIES

속성	값	테스트 표준
Melt volume flow rate (MVR), 235°C / 2.16 kg (455°F / 4.4 lb)	6 cm³/10min	ISO 1133
Shrinkage, Parallel (t+24h)	0.7 %	ISO 294-4
Shrinkage, Normal (t+24h)	1.2 %	ISO 294-4

MECHANICAL PROPERTIES

속성	DRY / COND VALUE*	테스트 표준
Hardness, Shore D, 15 s	- / 74	ISO 868
Charpy unnotched impact strength, 23°C (73°F)	40 / 44 kJ/m2	ISO 179 1eU
Charpy unnotched impact strength, -30°C (-22°F)	44 / 45 kJ/m2	ISO 179 1eU
Charpy notched impact strength, 23°C (73°F)	9 / 9 kJ/m2	ISO 179 1eA
Charpy notched impact strength, -30°C (-22°F)	6 / 6 kJ/m2	ISO 179 1eA
Nominal strain at break, 23°C (73°F), 50 mm/min	4 / 4.1 %	ISO 527-1/-2
Yield strain, 23°C (73°F), 50 mm/min	3 / 3.4 %	ISO 527-1/-2
Yield stress, 23°C (73°F), 50 mm/min	78 / 70 MPa	ISO 527-1/-2
Tensile modulus, 23°C (73°F), 1 mm/min	4000 / 3650 MPa	ISO 527-1/-2
Flexural modulus, 23°C (73°F)	- / 2900 MPa	ISO 178

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

ORGALLOY® RS 6010 NAT

속성	값	테스트 표준
Vicat softening temperature, 50N at 50°C/h	167 °C	ISO 306
Heat deflection temperature, 0.45 MPa	197 °C	ISO 75-1/-2
Heat deflection temperature, 1.8 MPa	187 °C	ISO 75-1/-2
Melting temperature, 10°C/min	220 °C	ISO 11357-1/-3

THERMAL PROPERTIESELECTRICAL 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)	- / >1E13 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	- / 3	IEC 60250
Relative permittivity, 1Mhz	- / 3	IEC 60250
Dissipation factor, 100Hz	- / 630	IEC 60250
Dissipation factor, 1Mhz	- / 630	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	5.9 %	ISO 62
Specific gravity, 23°C (73°F)	1.12 g/cm³	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

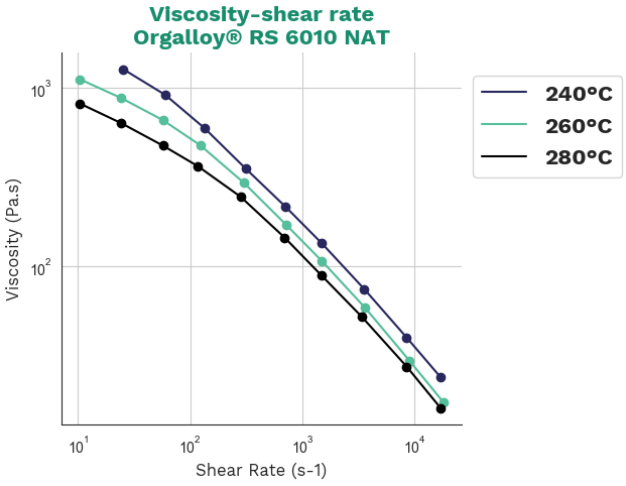
Two years from the date of delivery, when stored properly (sealed bags, appropriate moisture, UV protection and temperature). For any use above this limit, please refer to our technical services.

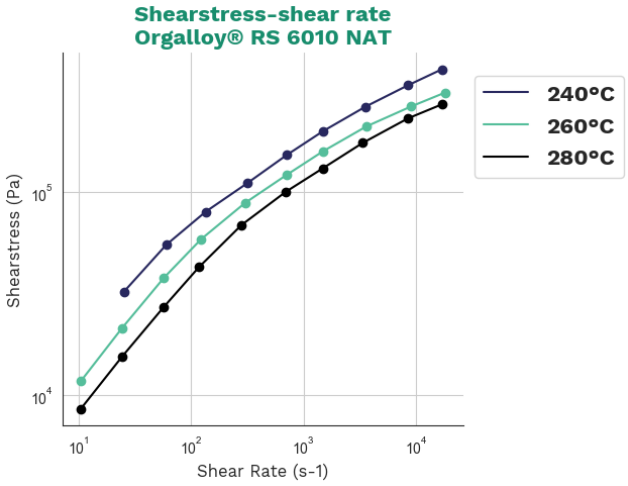
PROCESSING CONDITIONS:

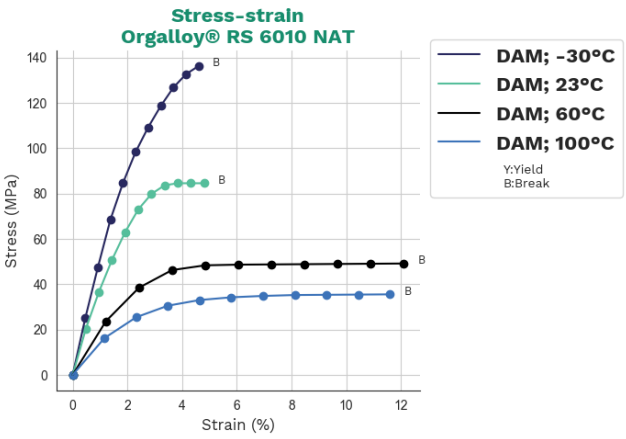
- Typical melt temperature (Min / Recommended / Max) - Injection Molding: 250°C / 270°C / 290°C (480°F / 520°F / 555°F)
- Typical mold temperature - Injection molding: 20-60°C (70-140°F)
- Drying time and temperature: 80-90°C (175-195°F) / 4-6 hours

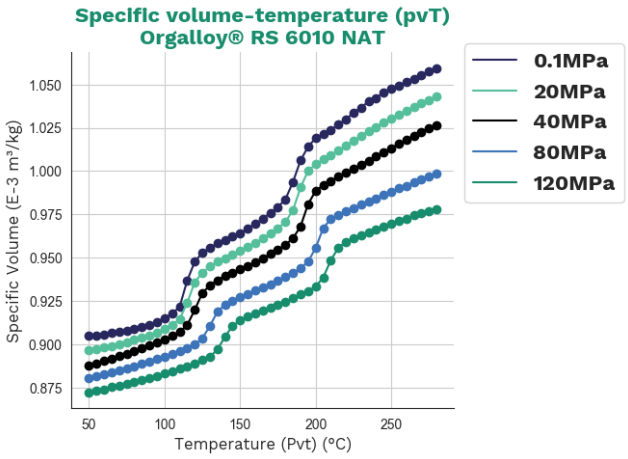
ORGALLOY® RS 6010 NAT

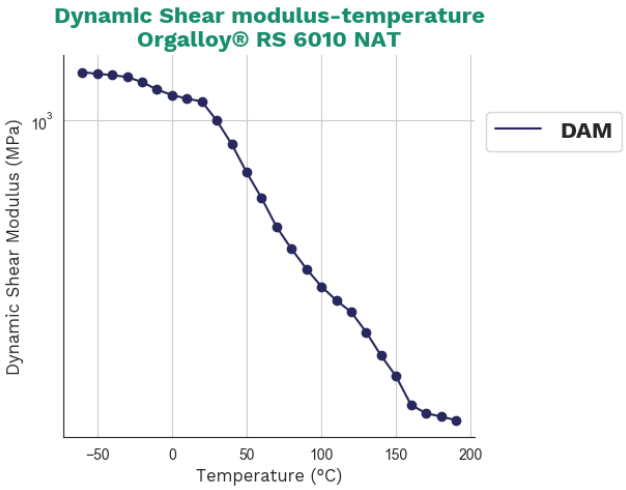
DIAGRAMS











ORGALLOY® RS 6010 NAT

Headquarter: Arkema France
420, rue d'Estienne d'Orves
92705 Colombes Cedex – France
T +33 (0)1 49 00 80 80