



## BLACK COMPOUND ALCUDIA® T100NLS

ALCUDIA® T100NLS black compound is a high density polyethylene with a broad bimodal molecular weight distribution designed for the extrusion of large diameter pressure pipes. It complies with the requirements of EN 12201 and EN 1555, with a MRS 10MPa - PE100 classification.

The combination of the antioxidant system and minimum of 2.0 % well dispersed carbon black used in ALCUDIA® T100NLS provides an excellent protection against thermal oxidation during processing and good long-term thermal stability and UV resistance.

### TYPICAL APPLICATIONS

- Large diameter and thickness pressure pipes for gas, industrial and drinking water transport and distribution.
- Large diameter pipes without pressure.

Recommended melt temperature range from 220 to 250 °C. Processing conditions should be optimised for each production line.

PROPERTIES	VALUE	UNIT	TEST METHOD
<b>General</b>			
Melt Flow Rate (190°C, 21.6 kg)	7	g/10 min	ISO 1133
Melt Flow Rate (190°C, 5 kg)	0.27	g/10 min	ISO 1133
Density at 23°C	962	kg/m <sup>3</sup>	ISO 1183
<b>Mechanical</b>			
Tensile Strength at Break	38	MPa	ISO 527-2
Tensile Strain at Break	> 800	%	ISO 527-2
Flexural modulus of elasticity	1000	MPa	ISO 178
<b>Internal Pressure Resistance</b>			
Long-term hydrostatic strength for 50 years at 20°C (97,5% LCL), MRS	> 10.0	MPa	ISO TR 9080
<b>Others</b>			
Oxidation Induction Time (210°C)	> 20	min	UNE EN 728
Vicat Softening temperature (10 N)	128	°C	ISO 306
Shore Hardness D	60	-	ISO 868

ALCUDIA® T100NLS black compound complies with the European Directives regarding materials intended for contact with foodstuffs. For further information, please contact our Technical Service and Development Laboratory or our Customer Care Service.

### STORAGE

ALCUDIA® T100NLS black compound should be stored in a dry atmosphere, on a paved, drained and not flooded area, at temperatures under 60 °C and protected from UV radiation. Storage under inappropriate conditions could initiate degradation processes which may have a negative influence on the processability and the properties of the transformed product.

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