



PRODUCT INFORMATION

NILENE E V2 LBAF

Polypropylene copolymer flame retardant UL94 V2, without antimony trioxide, good mechanical properties.

ISO short ISO 1043: PP FR(14+30)
Form Pellets
UL file E143048

Key Features

- Unfilled
- Designed for injection moulding applications
- Low Halogen content
- Flame retardant
- Low density
- Antimony trioxide free

Availability

- YT: laser printable
- S: heat stabilized
- L: UV stabilized
- D: detergent stabilized
- All colours

Compliance

- UL94 V2 all colours approved at 0,8 mm.

Process

- INJECTION MOULDING

Application

- Power tools
- Household
- Electronic
- Electrical

Property	Method	Unit	Value	Condition	State
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ELECTRICAL

Tracking Resistance (CTI - Method A)	IEC 60112	Volt	600		
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PHYSICAL

Density (+23°C)	ISO 1183	g/cm ³	0,93		
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Water Absorption (24h / +23°C)	ISO 62	%	0,05		
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Mould Shrinkage (Parallel)	Internal method	%	1,4		
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Mould Shrinkage (Normal)	Internal method	%	1,4		
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MECHANICAL

Tensile Modulus	ISO 527-1,2	MPa	1400	Speed 5 mm/min	
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The listed data are in the normal range of product properties, they should not be used to establish specification nor as the basis of design. Values are valid for natural coloured version only.

Unless specified to the contrary, the given values have been established on standardized test specimens at room temperature. These values are for natural colour only. The figures should be regarded as guide values only and not as binding minimum values. Please note that, under certain conditions, the properties can be affected to a considerable extent by the design of the mold/die, the processing conditions, pigments and any other additives.

All information, recommendation or technical advice provided by TARO PLAST S.p.A. are given in good faith but without warranty, to the best of its knowledge and based on current procedures in effect. Our advice does not release you from the obligation to check its validity and to test our products as to their suitability for the intended processes and uses. The application, use and processing methods and conditions of our products and the products manufactured by you on the basis of our technical advice are beyond our control and, therefore, entirely under your own responsibility.

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Elongation at Yield	ISO 527-1,2	%	100	Speed 50 mm/min
Tensile Yield Strength	ISO 527-1,2	MPa	23	Speed 50 mm/min
Elongation at Break	ISO 527-1,2	%	90	Speed 50 mm/min
Flexural Modulus	ISO 178	MPa	1350	Speed 1 mm/min
IZOD Notched Impact	ASTM D256	J/m	55	-10°C
IZOD Notched Impact (+23°C)	ASTM D256	J/m	70	
IZOD Notched Impact (0°C)	ASTM D256	J/m	62	
IZOD Notched Impact (-25°C)	ASTM D256	J/m	45	
CHARPY Notched Impact	ISO 179/1eA	kJ/m ²	5,3	-10°C
CHARPY Notched Impact (+23°C)	ISO 179/1eA	kJ/m ²	6,5	

THERMAL

Softening Temperature - 1 kg (VST/A/50)	ISO 306	°C	142	
Softening Temperature - 5 kg (VST/B/50)	ISO 306	°C	70	
Deflection Temperature 1,80 MPa (HDT A)	ISO 75A	°C	55	
Deflection Temperature 0,45 MPa (HDT B)	ISO 75B	°C	95	
Continuous service temperature (20.000 h)	UL746 B	°C	100	
Continuous service temperature (short term)	UL746 B	°C	135	

FLAMMABILITY

Flame Behaviour (0,8 mm)	UL94	Class	V2	UL approved
Glow Wire Flammability Index-GWFI (1,6 mm)	IEC 60695-2-12	°C	960	
Oxygen index	ASTM D2863	%	26	

INJECTION MOULDING

	Value
Drying Temperature (Desiccant Dryer)	70 - 80°C
Drying Time (Desiccant Dryer)	2 - 4 hours
Suggested Max Regrind	< 10%
Melt Temperature	190 - 220°C
Feed Temperature	160°C
Rear Temperature	185°C

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Middle Temperature	195°C
Front Temperature	205°C
Nozzle Temperature	215°C
Mould Temperature	40 - 60°C
Injection Rate	Slow to Medium
Injection Pressure	70 - 120 Mpa
Packing Pressure	40 - 100 Mpa
Back Pressure	5 - 10 Mpa
Screw Revolving Speed	< 300 mm/sec
Cushion	< 5 mm
Vent Depth	0,05 mm

Notes It is normally not necessary to dry NILENE compounds, however should there be surface moisture (condensate) on the moulding compound as a result of incorrect storage, drying process is required. NILENE must be stored indoors at a temperature below 40°C avoiding humidity and direct sunlight as well. NILENE can be processed on a standard injection moulding unit. A general purpose metering screw is recommended with a zone distribution of 40% feed, 40% transition and 20% metering. When the heating cylinder is completely purged of NILENE material the machine may be shut down.

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