



16E Tuas Avenue 1, #05-61, JTC Space@Tuas Singapore 639537. Tel: +65 6397 5001

TECHNICAL DATA SHEET NYCOLON A6L-12 UV M BLACK

NYLON 12 SPECIAL COMPOUND SUITABLE FOR FLEXIBLE PIPES, TUBES AND SHEATHING OF "TECHNICAL CABLES"

APR 2024

PROVISIONAL: REV. 02

DESCRIPTION

Nycolon A6L-12 UV M Black is a thermoplastic Polyamide 12 compound based. This compound offers outstanding chemical, oil and fuel and hydrolysis resistance. It is also excellent in physical and mechanical performances resulting in tubes and sheathings with optimal harsh weather resistance and termite resistant. Good process ability and excellent extrusion stability. Compound available in various colour upon request.

PHYSICAL CHARACTERISTICS		UNIT	TYPICAL VALUE	TEST METHODS
Density		g/cm ³	1.02	ISO 1183
Melting Temperature		°C	177 ± 5	ISO 11357
Melt Flow Index 2.16kg / 235 °C		g/10min	4-12	ISO 1133
Water absorption	23°C, saturated *	%	2.5	ISO 62
	23°C/50% UR		1	
Mold shrinkage	in flow direction	%	0.8	ISO 294
	In transverse direction		1.0	
MECHAICAL CHARACTERISTICS		UNIT	TYPICAL VALUE	TEST METHODS
Stress at Yield		MPa	60	ISO 527-1/2
Strain at Yield		%	8	ISO 527-1/2
Strain at Break		%	>50	ISO 527-1/2
Tensile Modulus		MPa	1300	ISO 527-1/2
Flexural Modulus		MPa	1200	ISO 178/1A
Charpy Notched Impact Strength	+ 23 °C	kJ/m ²	10	ISO 179/1 eA
	- 30 °C		9	
Charpy Impact Strength	+ 23 °C	kJ/m ²	No breaks	ISO 179/1 eU
	- 30 °C		No breaks	
THERMAL CHARACTERISTICS		UNIT	TYPICAL VALUE	TEST METHODS
Temperature of Deflection under Load	1.8 MPa	°C	45	ISO 75
	0.45 MPa		95	
Vicat Softening Temperature	50N	°C	125	ISO 306
OTHER CHARACTERISTICS		UNIT	TYPICAL VALUE	TEST METHODS
Flammability UL94		1.6 mm	HB	EC60695
		3.2 mm		



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STORAGE AND SHELF LIFE

Nycolon A6L-12 UV M Black normally has 12 month shelf life from the date of manufacture. However, the following precautions should be observed.

- Packaging should remain sealed
- Avoid storage outside and in direct sunlight
- Use within 8 hours of opening packaging

Synergychem PTE LTD accepts no liability of any kind in case the above mentioned conditions are not fulfilled.

TRANSPORT

Not regulated for the transportation.

PACKAGING

Product is available in 25kg moisture resistance bag on pallet. Different packages are available on customer request. Product is stable if maintained in the original sealed bag and under ordinary storage conditions.

Normal precautions to a good industrial hygiene and safe working place are, generally, sufficient in handling the preparation, however all operators are kindly requested to handle, use and dispose all wastes of the preparation in accordance with the information reported on SDS.