

Nylon 6.6 Sheet & Rod - Extruded Natural



Physical Properties	Test	Unit	Result
1. Specific gravity	ISO 1183	g/cm ³	1.14
2. Water absorption	ISO 62	%	8
3. Maximum service temp. Upper temp limit (no stronger mechanical stress involved)	-	°C	95
Lower temp limit	-	°C	-30

Mechanical Properties	Test	Unit	Result
1. Tensile strength at yield	ISO 527	MPa	90
2. Elongation at yield	ISO 527	%	-
3. Tensile strength at break	ISO 527	MPa	-
4. Elongation at break	ISO 527	%	>40
5. Impact strength	ISO 179	kJ/m ²	no break
6. Notch impact strength	ISO 179	kJ/m ²	6
7. Ball indentation / Rockwell hardness	ISO 2039-1	MPa	160 / M85
8. Shore-D	DIN 53505	-	-
9. Flexural strength	ISO 178	MPa	2800
10. Modulus of elasticity	ISO 527	MPa	3100

Thermal Properties	Test Method	Unit	Result
1. Vicat-softening point VST/B/50	ISO 306	°C	-
2. Heat deflection temperature HDT/B	ISO 75	°C	-
HDT/A	-	°C	85
3. Coefficient of linear thermal expansion	DIN 53752	k ⁻¹ *10 ⁻⁴	0.8
4. Thermal conductivity at 20 °C	DIN 52612	W/(m*K)	0.28

Electrical Properties	Test Method	Unit	Result
1. Volume resistivity	VDE 0303	Ω x m	10 ¹²
2. Surface resistivity	-	Ω	10 ¹³
3. Dielectric constant at 1MHz	-	-	3.3
4. Dielectric loss factor at 1 MHz	DIN 53483	-	0.026
5. Dielectric strength	VDE 0303	kV/mm	27
6. Tracking resistance	IEC 60112	-	600

Additional Data	Test Method	Unit	Result
1. Bondability	-	-	+
2. Food compliance	FDA	-	+
3. Flammability	UL 94	-	V-2

Key:

Yes	Limited	No or no data
+	o	-

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Agent	Conc %	Working Temp	
		20°C	60°C
Acetic Acid	100	-	-
Acetone	100	o	o
Ammonia	Conc.	+/o	-
Ammonium chloride		+	
Amyl Alcohol		+	
Benzene		+	+
Bleaching Solution	12,5 Cl	-	-
Boric Acid	100	+/o	o
Brake Fluid		+	+
Butyl Acetate		+	
Calcium Chloride		+	+
Carbon disulphide	100	+	-
Carbon Tetrachloride		+	
Chlorine, gas	100	-	
Chlorobenzene	100	+	
Chloroform		o	o/-
Citric Acid	10	+	
Cresol		-	-
Cyclohexanone	100	+	
Cyclohexene	100	+	+
Diesel Fuel		+	+
Ethyl acetate	100	+	
Ethyl alcohol	96	+	+
Ethylene Chloride	100	+	
Formic Acid	10	-	-
Frost protection agent		+	+
Fuel, aromatic free		+	+
Glycerine	100	+	+
Glycol	100	+	o
Heating oil		+	+
Heptane	100	-	-
Hydrochloric acid	10	-	-
Hydrochloric acid	Conc.	-	-

Agent	Conc %	Working Temp	
		20°C	60°C
Hydrofluoric acid	40	-	-
Hydrogen peroxide	10	+/o	-
Hydrogen Sulphide		+	
Isopropyl Alcohol	100	+	+
Mercurochrome		-	-
Methyl alcohol	100	+	
Methyl ethyl ketone	100	+	
Methylene chloride	100	o	
Nitric acid	50	-	-
Nitrobenzine		o	
Oxalic Acid		o	
Ozone, gas	ca. 0,5 ppm	-	-
Paraffin Oil	100	+	+
Perchlorethylene		o	-
Petroleum	100	+	
Petroleum, aromatic free	100		
Phenol, aqu	ca.9	-	-
Phosphoric Acid	50	-	-
Potassium hydroxide liquor	50	o	+
Propyl alcohol			
Pyridine		+	o
Silicone oil		+	+
Sodium carbonate, aqu		+	+
Sodium chloride, aqu		+	+
Sodium Hydroxide liquor	15	+	
Sodium Hydroxide liquor	60	o	
Sodium hydrogen sulphite		+	
Sodium nitrate, aqu		+	
Sodium thiosulfate			
Sulphuric Acid	96	-	-
Tetrahydrofuran	100	+	
Toluene	100	+	+
Trichlorethylene	100	-	-
Xylene		-	-

Key:

Resistant	Partly Resistant	Non-Resistant
+	o	-

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safety properties

Limitation of exposition

Ingredients with occupational exposure limits to be monitored : none

Personal (body) protection :

General protective and : Keep the workplace sufficiently ventilated; thereby smoking;

Hygiene measures eating and drinking are not allowed.

Continuous supply of fresh air to the workplace together with removal of processing fumes through exhaust systems is recommended. Avoid breathing in gaseous degradation products and dust that may result by material overheating.

Hand protection : Safety gloves in case of contact with warm material

Eye protection : Safety goggles or shield during machining

Body protection : Working clothes

Respiratory protection : Adequate ventilation at workplace is required

Physical and chemical characteristics

Physical state (rods, hollow rods and plates)

Aggregate : solid

Colour : product-specific

Odour : slight, product specific

Safety related facts

Boiling point : N/A

Melting point : 260 °C (DIN/EN/ISO 3146)

Corrosion temperature : > 350 °C

Flash point : > 390 °C

Self ignition temperature : > 400 °C (ASTM D1929)

Explosion hazard or limit : non explosive

Oxidizing characteristics : None

Density (20 °C) : 1.14 g/cm³ (ISO 1183)

Solubility (in Water 20 °C) : insoluble

Viscosity : N/A

Additional Information : None

Stability and reactivity

Conditions to avoid : Temperatures above melting point

Material to avoid : Strong oxidant

Hazardous decomposition : Carbon monoxide CAS-Nr. 630-08-0

products Hydrogen cyanide (HCN) CAS-Nr. 74-90-8

Ammonia (NH₃) CAS-Nr. 7664-41-7

Toxic information

Toxicology : Based on our experience and information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Primary Irritation on skin : N/A

Primary Irritation on eyes : N/A

Sensitization : not known

Practical Tests : N/A

Additional information : N/A

Ecological information

The material does not harm the environment but is not biologically degradable.

Waste-disposal information

The product must be disposed in accordance with the local authorities.

Transport information

Not classified as hazardous under transport regulations.