

METAL MESH

CAST ACRYLIC DATA SHEET

3 TO 30 MM THICKNESS

APPEARANCE

Physical state	Transparent, Translucent or Opal Solid Sheet
Colour	Coloured or Colourless
Odour	None
Protection	PE films
Thickness	Tolerance according to UNI EN ISO 7823-1

PHYSICAL PROPERTIES

Density	1.19 g/cm ³	ISO 1183	
Water absorption	0.23 %	ISO 62	
Refractive index	1.49	ASTM D542:2014	
Tensile test at 23 °C		ISO 527	
Tensile strength	67 MPa		
Tensile modulus of elasticity	3000 MPa		
Tensile elongation at break	3.7 %		
Flexural test at 23 °C		ISO 178	
Flexural strength	110 MPa		
Flexural modulus of elasticity	3000 MPa		
Flexural elongation at break	5.5 %		
Izod impact strength (notched)	Izod impact strength (notched)	1.8 KJ/m ²	ISO 180
Compression resistance	111.5 N/mm ²	UNI 4279/72	
Hardness (Shore D)	87.5	ISO 868	
Soundproofing thickness 4 mm (Rw)	26 dB	UNI EN 1793-2	
Soundproofing thickness 6 mm (Rw)	30 dB	UNI EN 1793-2	
Soundproofing thickness 10 mm (Rw)	32 dB	UNI EN 1793-2	
Soundproofing thickness 15 mm (Rw)	34 dB	UNI EN 1793-2	
Wind load stability	210 Kg/m ²	UNI EN 1794-1:2010	



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CHEMICAL PROPERTIES

Solubility in water	insoluble
Solubility in organic compound	1) aromatics hydrocarbons
	2) alkyl halides
	3) ketones
	4) esters
	5) ethers
	6) alcohols
Domestic detergent resistance	in accordance with EN 263
Thermal stability	in accordance with EN 263
Hot water resistance	in accordance with EN 263
Light stability	with UV absorbers

THERMAL PROPERTIES

Vicat softening temperature	100±110 °C	ISO 306
Heat of combustion	-26200 KJ/Kg	UNI EN ISO 18125:2018
Thermal stability		in accordance with EN 263
Linear thermal expansion coefficient	72 E-6 K ⁻¹	UNI 6061
Thermal conductivity	0.19 W/m·K	DIN 52612
Thermal diffusivity	0.11 mm ² /s	
Volumetric heat capacity	1.68 MJ/m ³ ·K	
Maximum of continuous service temperature	60 °C	
Resistance to fire of bush	Class 3	UNI EN 1794-2:2010
Degradation temperature	240 °C	
Fire classification of construction products and building elements	Class E	UNI EN 13501-1:2009 in compliance with UNI EN ISO 11925-2:2010
Flash point	B2	DIN 4102
Flash point	Class E	EN 13501-1

MAINTENANCE

Use water and soap with a soft cloth for cleaning. Do not use solvents such as alcohol or acetone.

NOTE

The information contained in this document is accurate and based on the best of our knowledge of the product but it does not constitute any guarantee for Materials Inc. unless explicitly given.

