

Technical Data Sheet ABS HB with finishing

Feedstock: Acrylonitrile-Butadiene-Styrene

Mechanical properties:

very high dielectric strength

Green density ¹	ISO 1183	≈1,05-1,12	g/cm ³
Yield stress	ISO 527	≥ 28	(MPa) N/mm ²
Expansion at yield stress	ISO 527	> 10 - 50	%
Impact Charpy +23°C notched	ISO179	≥ 9	kJ/m ²
Impact Charpy -30°C notched	ISO179	≥ 5	kJ/m ²

¹ This value can slightly vary as a result of pigmentation or addition.

Thermal properties:

Permanent service temperature		80	°C
Vicat Softening Point B/50	ISO 306	≥ 92	°C
Heat Distortion Temperature (A)	ISO 75	≥ 87	°C
Thermal conductivity	ASTM C177	0,16	W/mK

Electrical properties:

Specific volume resistivity	DIN EN 61340-5-1	10 ¹³	Ωcm
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Chemical resistance (ABS in general):

resistant ² :	plant and animal mineral oils; alcohols; diluted acids; concentrated hydrochloric and phosphoric acid
not resistant:	solvents ² ; concentrated sulphuric and nitric acid ³
dissolves in ³ :	esters; ketones; ethylene dichloride; Aceton

²maschinenbau-wissen.de

³resinex.de

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Flammability support material:

Flammability rating	UL 94	HB
UL file numbers	E162447; E106635; E115797; E39437; E108538	
Glow wire test 650 °C	IEC 695-2-1	-

Designation in technical drawings, Example with PMMA topcoat:

ABS24 + PMMA schwarz - 3mm

ABS24	= material and colour (black Acrylonitrile-Butadiene-Styrene)
+PMMA	= coat of PMMA (smooth, gleaming)
schwarz	= black
3mm	= thickness

Designation in technical drawings, Example with Decorfilm:

ABS24 GE03 alu-brushed gl.

ABS24	= material and colour (black Acrylonitrile-Butadiene-Styrene)
GE03	= fabric und thickness (fine structured, 3mm)
alu-brushed gl.	= colour décor film (alu-brushed, gleaming)

Colours with PMMA topcoat (UL 94 - HB):

		3mm	4mm	5mm	6mm
ABS 24 PMMA	black	X		X	
ABS 35 PMMA	white	X	X		X
ABS PMMA	grey metallic	X	X		X

Colours with Decorfilm (no UL Listing):

		3mm	4mm	5mm	6mm
ABS 24 alu-brushed	support material: black décor film: alu-brushed gleaming	X	X	X	
ABS 24 alu-brushed	support material: black décor film: alu-brushed matt	X	X		X

Printability:

printable

Current state: 06.01.2020