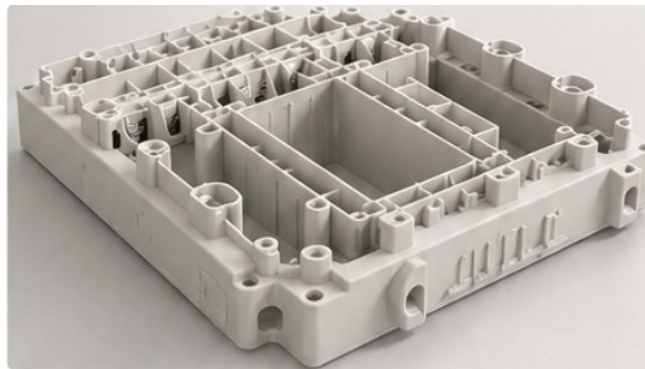


ATH 60H

HARD TYPE

Akusta Plast ATH 60H is a rigid flame retardant plastic sheet with high strength and excellent structural stability.

- Isolates fire effectively while maintaining strength and durability.
- Suitable for rigid applications such as wall panels, facades, electrical housings and pipe protection in construction and industry.
- Maintains non-combustibility and protects structures at high temperature.
- Enhanced acoustic performance.



Application example: Injection molded electrical housing

PROPERTY	CONDITION	UNIT	VALUE	TEST METHOD
Specific gravity	23°C	—	1.535	KS M ISO 1183
Water absorption	50°C, 24 h	%	0.02	ASTM D570
Tensile strength	At break	MPa	5.7	KS M ISO 527-2
Elongation	At break	%	43	KS M ISO 527-2
Yield strength	Upper yield	MPa	5.9	KS M ISO 527-2
Yield elongation	Upper yield	%	0.65	KS M ISO 527-2
Tensile modulus	—	MPa	1,090	KS M ISO 527-2
Flexural strength	—	MPa	9.8	KS M ISO 178
Flexural modulus	—	MPa	1,080	KS M ISO 178
Izod impact strength	2.0 mm	kJ/m ²	19	KS M ISO 180 (Notched)
Izod impact strength	2.0 mm, -30°C 3 h	kJ/m ²	9.5	KS M ISO 180 (Notched)
Charpy impact strength	2.0 mm	kJ/m ²	21	KS M ISO 179-1 (Notched)
Charpy impact strength	2.0 mm, -30°C 3 h	kJ/m ²	7.3	KS M ISO 179-1 (Notched)
Hardness (Rockwell)	R scale	—	24	Per KS M ISO 2039-2
Heat deflection temperature	1.82 MPa, flat wise	°C	39	KS M ISO 75-1
Vicat softening temperature	50 N load	°C	43	KS M ISO 306-B120
Surface resistivity	—	Ω/sq	2.6 × 10 ¹¹	ASTM D257
Volume resistivity	—	Ω-cm	8.6 × 10 ¹³	ASTM D257
Dielectric constant	60 Hz	—	6.2	ASTM D150
Dissipation factor	60 Hz	—	0.0141	ASTM D150
Dielectric constant	100 kHz	—	4.71	ASTM D150
Dissipation factor	100 kHz	—	0.0079	ASTM D150
Dielectric constant	1 MHz	—	4.47	ASTM D150
Dissipation factor	1 MHz	—	0.0083	ASTM D150
Flame retardancy	3.2 mm	Rating	V-0	UL 94 : 2023

FIRE SAFETY • MATERIAL PERFORMANCE • PEACE OF MIND.

Akusta Plast combines proven flame retardant performance with strong mechanical and physical properties for construction, industrial and electrical applications.

DETAILED TEST REPORTS AVAILABLE UPON REQUEST.

Please contact us for further information.

ATH 70S

SOFT TYPE

Akusta Plast ATH 70S is a flexible flame retardant plastic sheet designed for applications that require excellent flexibility, durability and reliable fire protection.

- Releases steam at high temperature to cool and slow fire spread.
- Ideal for flexible interiors such as soft leather, cushions, mattresses, wall panels and carpets without sacrificing comfort.
- Also used in cable and electrical enclosure flame retardant solutions.



Application example: Flexible wall panels (formed in one piece)

PROPERTY	CONDITION	UNIT	VALUE	TEST METHOD
Specific gravity	23°C	—	1.679	KS M ISO 1183
Water absorption	50°C, 24 h	%	0.02	Per ASTM D570
Tensile strength	At break	MPa	2.4	KS M ISO 527-2
Elongation	At break	%	38	KS M ISO 527-2
Yield strength	Upper yield	MPa	0.9	KS M ISO 527-2
Yield elongation	Upper yield	%	1.1	KS M ISO 527-2
Tensile modulus	—	MPa	64	KS M ISO 527-2
Flexural strength	—	MPa	2.1	KS M ISO 178
Flexural modulus	—	MPa	70	KS M ISO 178
Izod impact strength	2.0 mm	kJ/m ²	13	KS M ISO 180 (Notched)
Izod impact strength	2.0 mm, -30°C 3 h	kJ/m ²	17	KS M ISO 180 (Notched)
Charpy impact strength	2.0 mm	kJ/m ²	22	KS M ISO 179-1 (Notched)
Charpy impact strength	2.0 mm, -30°C 3 h	kJ/m ²	7.2	KS M ISO 179-1 (Notched)
Hardness (Rockwell)	R scale	—	46	Per KS M ISO 2039-2
Vicat softening temperature	10 N load	°C	47	KS M ISO 306-A120
Surface resistivity	—	Ω/sq	1.2 × 10 ¹¹ ■	Per ASTM D257
Volume resistivity	—	Ω-cm	2.1 × 10 ¹³	Per ASTM D257
Dielectric constant	60 Hz	—	8.4	ASTM D150
Dissipation factor	60 Hz	—	0.0132	ASTM D150
Dielectric constant	100 kHz	—	6.4	ASTM D150
Dissipation factor	100 kHz	—	0.0048	ASTM D150
Dielectric constant	1 MHz	—	6.2	ASTM D150
Dissipation factor	1 MHz	—	0.0047	ASTM D150
Flame retardancy	2.2 mm, 3.2 mm	Rating	V-0	UL 94 : 2023

FIRE SAFETY • MATERIAL PERFORMANCE • PEACE OF MIND.

Akusta Plast combines proven flame retardant performance with strong mechanical and physical properties for a wide range of construction, industrial and electrical applications.

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