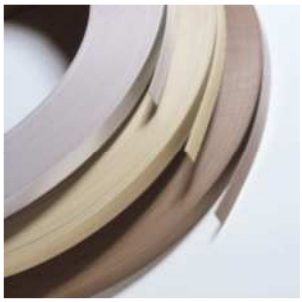
PRODUCT DATA SHEET

EGGER SECURITY EDGING ABS



EGGER Security Edging ABS is a thermoplastic edging product with protective and aesthetic properties for finishing narrow areas on wood-based panels. EGGER Security Edging is made of hard ABS and is stained. The reverse side has a universal bonding agent as standard (primer).

Uses / Applications

EGGER Security Edging ABS is used to finish narrow areas of laminated wood-based materials such as chipboards, MDF and HDF boards and provides the perfect finishing touch for all decorative surfaces. It can be used in a wide variety of areas: furniture for kitchens, bathrooms, offices and bedrooms, living rooms and teenager's rooms, exhibition fittings and shop systems, cabinet fronts, carcass elements, etc. EGGER Security Edging ABS is also suitable for finishing individually designed furniture components.

Product Properties

MATERIAL

EGGER Security Edging ABS is an extruded product. This process results in the uniform staining of the material and enables an exact and easy rounding of the edges. Hard ABS is resistant to acids, alkalis, salts, alcohol, petrol and oils but has limited resistance to solvents and alcohol. The highly impact-resistant material ensures long tool life for milling and other cutting tools.

ABS (acrylonitrile–butadiene–styrene) is an impact-resistant and mechanical and thermal-resistant high quality chlorine-free thermoplastic which is ecologically sound. If subjected to cold the only discernible effect is the gradual loss of viscosity. ABS has good impact strength reserves at temperatures down to -30 °C. EGGER Security Edging ABS possesses excellent resistance to extreme fluctuations in temperature and humidity.

PRODUCTION

Acrylonitrile–Butadiene–Styrene (ABS) is made from polybutadiene, a synthetic rubber, acrylonitrile and styrene. It has similar properties to PVC but is inherently more weather-resistant and therefore requires no additional stabilisers.
The butadiene enhances its workability so no plasticisers are needed.

SURFACES

The surfaces of EGGER Security Edging ABS are sealed with UV-hardened artificial resin lacquers to make them scratch resistant (UV coating procedure). They also have a high mechanical resistance to abrasion. Its properties also include high strength, notch impact strength, impact resistance, bending strength and surface hardness. After 24 hours exposure they remain resistant to staining and almost all household cleaners. The surfaces are washable, hygienically safe and moisture-resistant. Any irregularities caused by procedures or materials must not be apparent at a distance of 0.5 m. The precise tensioning and parallelism of EGGER Security Edging ABS gives a sealed, visually perfect joint. The tensioning also ensures optimum adhesion by collecting excess glue in the centre of the rear of the edging and anchoring the glue in the chipboard.

BONDING PROPERTIES

The rear of EGGER Security Edging ABS is coated with a universal bonding agent that is combined with standard hot-melt adhesives to create a firm bond between the edging and the core board. The layer of bonding agent has been optimised for use with *EVA, PA, APAO and PUR hot-melt adhesives. An extremely heat-resistant glue should be used if the product is likely to be exposed to critically high temperatures, e.g. in the kitchen or in shipping containers. Polyurethane hot-melt adhesives are particularly suitable for use in humid areas. Always follow the instructions of the respective adhesive supplier.

* EVA - Ethyl Vinyl Acetate
PA - Polyolefin
APAO - Amorphous Poly Alpha Olefins (based on polyolefin)
PUR - Polyurethane

Quality Features / Technical Data

Properties / mechanical / electrical	Unit	Value	Standard
Density	g/cm³	1,05 - 1,15	ISO 1183
Water absorption	%	0,3	ISO 62
Tensile strength	MPa	35	ISO 527
Elongation at break	%	45	ISO 527
Tension - E-module	MPa	2300	ISO 527
Ball indentation hardness H358/30	MPa	890	ISO 2039-1
Specific volume resistivity	Ohm x m	1.0E+15	IEC 60093
Dielectric constant	10³ Hz	3,1	IEC 60250
Specific surface resistivity	Ohm	1.0E + 14	IEC 60093

ABS Edgings are good electrical insulators and possess high surface and volume resistivity.

Properties	Unit	Value	Standard
Light fastness for internal use	-	≥ level 7	DIN 53388
Ball indentation hardness	[N/mm²]	100	DIN 53456
Hardness Shore D	-	81 ±3	DIN 53505 – ISO868
Linear thermal expansion coefficient	[1 / K x 10 ⁶]	90	ISO 11359-1/2
Vicat softening temperature	[°C]	108	DIN 53460
Maximum service temperature	°C	80 - 100	
Cold crack temperature	°C	-30	
Chemical resistance	-	very good	DIN 68861
Fire behaviour	-	HB	UL 94
Thermal value	MJ/KG	appr. 22	
Back-shrinkage 2 mm edge 1h at 80°C in oven	%	0,6	
Static charging	-	low	-
Processing characteristics			
▪ Cutting		good	
▪ Milling direction[1)]		Downcut / upcut milling[1)]	
▪ Pre-milling		good	
▪ Radius milling		good	
▪ Profiling		good	
▪ Scraper processing		good	
▪ Buffing		good	
▪ Bonding		All standard edging hot-melt adhesives permissible	
▪ Polishability		(EVA, PA, APAO, PUR), depending on the heat resistance of the adhesive.	
▪ Susceptibility to stress whitening		good	
▪ Lacquerability		low	
▪ Machining centre processing compatibility		good (Acrylic/PUR-lacquer)	
Disposal		good Edging remains can be incinerated with chips at suitable at suitable facilities. TA Luft limit values must be met.	

[1)] Upcut milling is recommended for all thermoplastic edging

Tolerances

EDGE WIDTH

Width [mm]	Tolerance [mm]
12 to 23	± 0,35
24 to 45	± 0,35

EDGE THICKNESS

Thickness [mm]	Tolerance [mm]
0,4 to 0,8	± 0,05
1,0 to 1,3	± 0,10
1,5 to 3,0	+ 0,15 / - 0,20

TENSIONING

Thickness [mm]	Width tolerance [mm]	
	to 30	from 30
0,0 to 1,0	0,00 - 0,35	0,00 - 0,35
1,1 to 2,0	0,00 - 0,35	0,00 - 0,35
2,1 to 4,0	0,00 - 0,35	0,00 - 0,35

PARALLELISM

Thickness [mm]	Maximum deviation [mm]
0 to 1,0	0,10
1,1 to 2,0	0,10
2,1 to 4,0	0,15

LONGITUDINAL DISTORTION

Max. 3 mm distortion for every 1 m of length.

STORAGE

EGGER Security Edging ABS is resistant to rot and may therefore be stored at room temperature (20 to 25°C) in a weatherproof room for an unlimited period. However, test any edges that are more than 12 months old before using them.

CLEANING

EGGER Security Edging ABS is easy to clean using commercial cleaning agents designed for plastic surfaces. The use of petrol, thinners, acetic acid, nail polish remover or similar solvent-based or alcohol-based fluids may dissolve the surface, and should therefore be avoided.

DISPOSAL

Thermal reuse is highly feasible due to the high calorific value of the product. Various expert opinions agree that this is not expected to significantly increase harmful emissions. Work pieces with ABS edges correspond to flammable materials class 6 of the 1st BImSchV (first ordinance on the implementation of the German emissions act (ordinance on small and medium-sized firing plants – 1st BImSchV) of 14th March 1997) and can be disposed of in wood firing plants with a nominal calorific output (calorific output is the amount of heat from a firing plant which can be used in a heating system. The heat output is measured in Kilowatt kW) of at least 50 kW. Waste from EGGER Security Edgings ABS can be incinerated together with chip waste in systems approved for this purpose. The process produces no chlorine compounds. The process complies with the stringent TA Luft limit values. Even chipboards with ABS edging attached can be disposed of without any problem. There is no need for time-consuming waste separation and/or edge removal.

Information about the processing of EGGER Security Edging ABS can be found in our processing instructions!