

Description

EnviroPlate has a very good toughness with a high degree of rigidity, and heat resistance. 100% recycled, an environmentally friendlier alternative to virgin material, where colour and surface quality is **not critical** to the end application. Its chemical resistance is excellent and has very low moisture vapour permeability, ideal as a barrier to water.

Applications

Car industry parts, technical articles, construction, industrial, machinery, Flooring/Wall Cladding, Chemical Tanks and tool housing.

Key Features

Economical / Environmental

An economically viable product that has been totally recycled.

Impact / Stiffness

Has moderately good impact compared to some other virgin polymer types. High modulus / stiffness.

Printing

Due to its high chemical resistance it needs to be corona treated or primed for ink adhesion.

Quality Conformity

This product is made from 100% recycled material.

Product Availability

Colour

Black

Finish

Natural smooth and a range of embossed finishes. The surface aesthetics may vary from batch to batch.

Thickness

2mm to 5mm

Sheet/Roll Size Specifications

Gauge	Standard Sheet Size
2mm to 5mm	2440mm x 1220mm
	3050mm x 1525mm

NB: Available sizes may vary depending on gauge / colours / embosses / order size, please ask for confirmation.

Note: The information contained in this leaflet is based on our present technical knowledge and experience. In view of the large number of factors that may influence the processing and use of our products, the information does not relieve the processors and manufacturers of the need to carry out their own tests and experiments. Our information does not constitute a legally binding assurance of product availability, of particular properties or of a suitability for a particular use. Patent rights that may exist must be duly observed.

Typical Physical Properties

Properties	Unit	Standard	Method	Value
Density [#]	g/cm ³	ISO1183	-	1.08
Impact Notched	Izod KJ/m ²	ISO 180	1A at 23°C	10
Tensile Strength	MPa	ISO 527	50 mm/min	35
Vicat Softening Point	°C	ISO 306	A/oil	95
Heat Distortion Temperature	°C	ISO 75	HDT/A 1.8MPa	86
Flammability Rating ^{**}	Rating	UL94	2.0 mm	HB

[#]The density quoted should only be used as a guide. This value can change depending upon the type and quantity of pigments or additives used.

^{**} UL 94 ratings based on raw material data

Additional Information

Thermoforming

Ideally mould draft angles between 4-6% and allow for 0.6-0.8% post mould shrinkage. Typical forming temperatures are between 150 – 185°C. During thermoforming the use of a heated steel or aluminium mould is strongly advised.

Storage

If sheet is stored in humid conditions for long periods then it should be dried before thermoforming, ideally at 80°C for approximately 2 hours, plus an additional hour for every 1 mm thickness. It is essential that enough space be left between the sheets (20-30mm) to allow correct drying. The time lapse between drying and forming should be minimised in order to save energy and reduce heating times. If sheets are left to stand at room temperature for a long period of time they may need to be re-dried.

Certification/Approvals

As there isn't a complete history on the source of material used it may not be possible to give any certification such as ROHS. Please contact Sales to discuss further.

Cleaning and Maintenance

Most common soaps or detergents dissolved in warm water can be used to effectively clean general dirt and surface contaminants. More stubborn solvent based markings i.e. ink, marker pen, etc. Can be removed using detergents but will probably require the stiff bristled brush or slightly abrasive pad to remove stains or markings if material is affected deep in the surface emboss. If the above doesn't work then try iso-propyl-alcohol or n-heptane. Abrasive scouring powders should be avoided. Areas of mouldings that have been dulled through cleaning can be restored using silicone based polishes.

Chemical Resistance

Chemical resistance is influenced by many factors, including concentration, temperature, exposure time and material stress. Therefore the data below should only be used as a guide.

Reagent	Chemical resistance	Reagent	Chemical resistance
Acetone	Not recommended	Brake Fluid	Not recommended
Acid – (Weak)	Excellent	Butter	Excellent
Acid – (Strong)	Good	Coffee	Excellent
Alcohol	Good / Fair	Detergent	Excellent
Anti-freeze	Excellent	Diesel	Good
Base (Weak)	Excellent	Foodstuffs	Good
Base (Strong)	Good	Lubricating Oil	Very Good
Battery Acid	Good	Petrol	Good

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