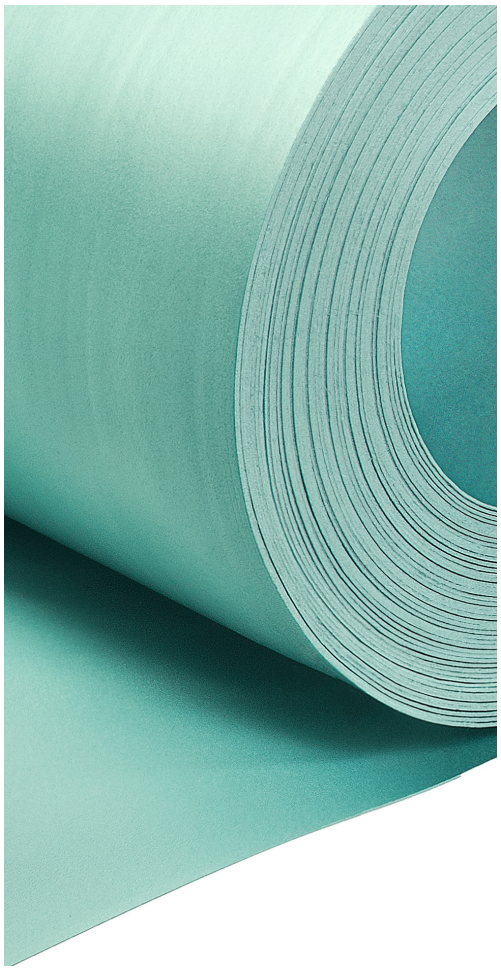
TECHNICAL DATA

ArmaPET® Curve

ArmaPET Curve is designed for recyclable thermoformable micro sandwich solutions produced in continuous manufacturing processes.

// 100% recycled material supports industry environmental and sustainability directives
// Available in large rolls and sheets
// Micro sandwich solution optimises strength-to-weight ratio
// Excellent three-dimensional thermoformability
// Superior temperature resistant solution for automotive interiors

www.armacell-core-foams.com



armacell®
ArmaPET®

THERMOFORMABLE FLEXIBLE SHEET

ARMAPET CURVE

Is the first **100% recyclable** and thermoplastic foil product **based on 100% recycled plastics.** Superior stiffness and compression combined with chemical and temperature stability characterise our innovative technical solution for thermoforming applications.

APPLICATIONS

The process versatility of ArmaPET Curve allows it **to be used** in a wide range of applications:

MICRO SANDWICH

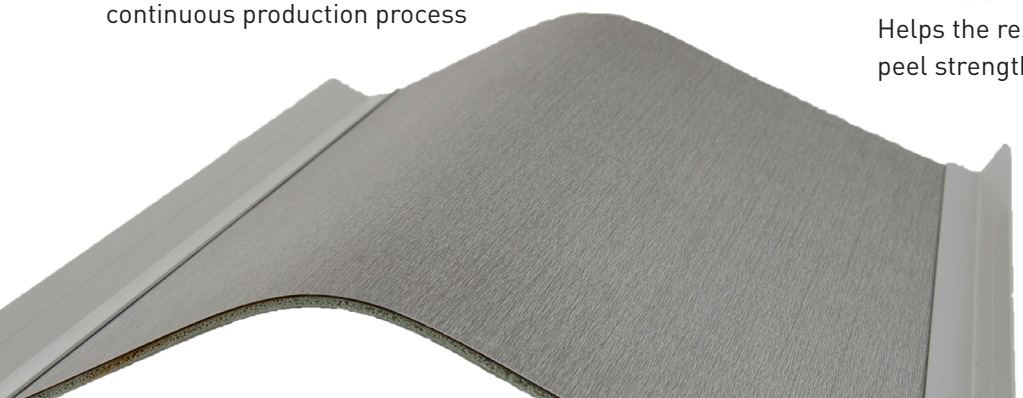
ArmaPET Curve is used as a lightweight thin core in a micro sandwich set-up with fibre-reinforced laminates for applications in building and construction (e.g. cladding panels and shelters) and in the transport market (e.g. HVAC ducts and interiors).

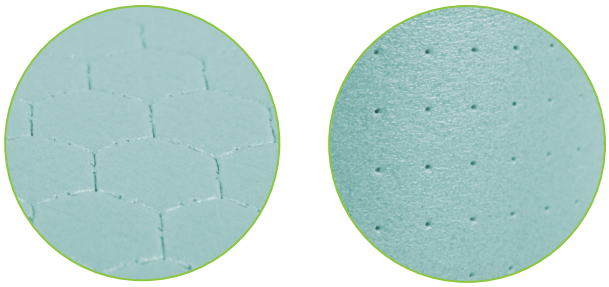
Key benefits: system cost performance / freedom of design / sustainability / reduced CO_2 emissions / improved fuel consumption

THERMOFORMED PARTS

Its thermoformability allows the creation of various shapes, whether as a part of a micro sandwich or on its own, and ArmaPET Curve is used as a lightweight solution in various markets, such as the automotive sector (e.g. for door water shields and roof liners) and the packaging industry (for packaging protection).

Key benefits: elevated thermoforming operating temperature / process versatility / supply in rolls for continuous production process





PROCESS VERSATILITY

The process versatility of ArmaPET Curve allows it **to be processed** in multiple ways:

THERMOFORMING

Shaping without cutting the foam, thus eliminating core stress concentration and increased resin consumption.

SURFACE SANDING

Increasing the surface roughness to improve adhesion.

PERFORATION

Punching of holes to improve adhesion. Perforation can also allow fibrous felts to stick without applying adhesives.

HEXAGONAL PATTERN

Helps the resin to flow smoothly and increases peel strength.

Technical Data

ArmaPET Curve

			Curve 100	Curve 150	Curve 200	Curve 300
Density [1]	**nominal**	kg/m³	100	150	200	300
		lb/ft³	6.2	9.4	12.5	18.7
Surface Weight	**nominal**	g/m²	300	375	500	450
		oz/yd²	8.8	11.1	14.7	13.3
Normal Thickness	**nominal**	mm	3	2.5	2.5	1.5
		in	0.12	0.1	0.1	0.06
Tensile Strength (MD) [2]	**ISO 527-3**	MPa	2,2	3,3	4,5	8
		psi	319.1	478.5	652.5	1160
Tear Strength (MD) [2]	**PSA D41 1126**	N	30	30	tbd	30
		lbs	6.7	6.7	tbd	6.7
Compression Strength	**ISO 844** at 25% deformation	kPa	170	300	420	650
		psi	24.7	43.5	60.9	94.3
Compression Strength	**ISO 844** at 50% deformation	kPa	310	650	1000	1800
		psi	44.9	94.3	145	261
Operating Temperature	**min / max**	°C	-40 /+180	-40 /+180	-40 /+180	-40 /+180
		°F	-38 /+356	-38 /+356	-38 /+356	-38 /+356
Fire Testing	**FMVSS 302**	Compliance with FMVSS 302. Customised formulations available on request.				

Values are indicative and can vary depending on actual dimensions and surface weight.
(1) Results based on defined surface weight and thickness
(2) Machine direction

Packaging

ArmaPET Curve is available in large rolls and sheets.
Width: 1080 mm, 1220 mm and 1580 mm / 42.52 inches, 48.03 inches, and 62.20 inches
Customised solutions available on a project basis.

POSITIVE ECO-BALANCE

As the first 100% recyclable thermoplastic foil product entirely based on recycled plastics, ArmaPET Curve supports the market's drive to provide more sustainable product solutions.

// Based on 100% recycled post-consumer PET

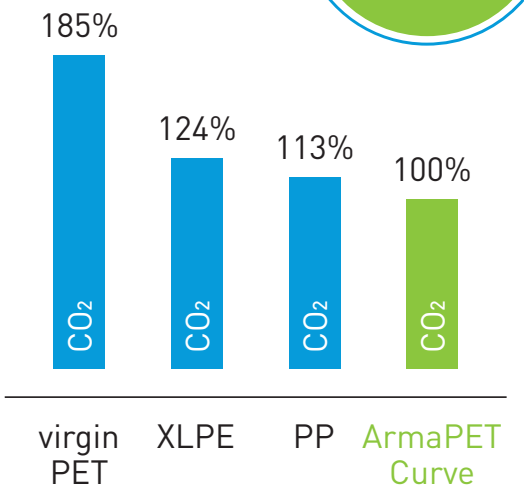
// 100% recyclable after use

// Manufactured in an energy- and resource-efficient production process

// Production scrap is returned to process and re-used for foam manufacturing to reduce waste

// Significant CO_2 emission savings

LESS CO_2



ABOUT ARMACELL

As the inventors of flexible foam for equipment insulation and a leading provider of engineered foams, Armacell develops innovative and safe thermal, acoustic and mechanical solutions that create sustainable value for its customers. Armacell's products significantly contribute to global energy efficiency making a difference around the world every day. With more than 3,200 employees and 25 production plants in 17 countries the company operates two main businesses, Advanced Insulation and Engineered Foams. Armacell focuses on insulation materials for technical equipment, high-performance foams for high-tech and lightweight applications and next generation aerogel blanket technology.

For more company information, please visit:
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armacell®
MAKING A DIFFERENCE AROUND THE WORLD