

Super Tough Material – Thermo welding & Plastomer Fabrics

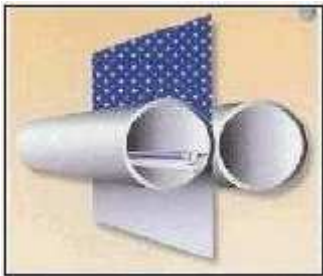
Perfect seams

Apart from the superior toughness and durability, our fabric allows the use of a computerized machine welding process known as Thermo Bonding



Two sealing strips are thermally bonded to the butt hull seams in a continuous electro – thermal process. A highly impermeable air seal is forced when the narrow inner strip literally melts into the hull material.

The wider exterior strip functions as an overlapping structural connection while also effectively sealing out water. Thermo bonding creates seams that are stronger than the base fabric itself and produces a much better seam than any hand gluing method.



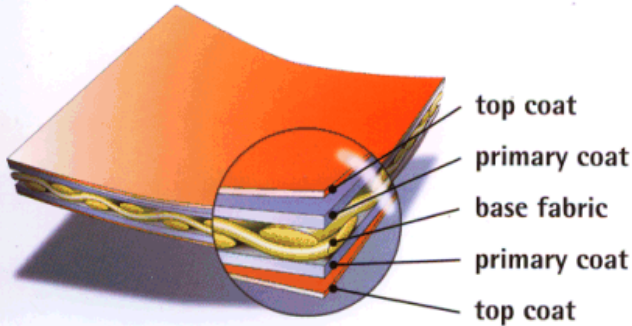
Super Tough Material

Some inflatable boats are still made from a synthetic rubber based fabric called Hypalon. While undoubtedly a good material in itself, it can only be joined by gluing – with all the potential problems inherited in this old fashioned, labor intensive manufacturing process. Today most modern inflatable boats manufactured worldwide e.g. Zodiac, Valiant are manufactured from polymer coated fabrics. This fabric consists of a strong, close weave.

Polyester support cloth which has been specially engineered to resist tearing, warping, and elongation. This base cloth is sandwiched between multiple plastomer coatings to provide extraordinary flexibility, superior air and water tightness as well as resistance to abrasion and the sun's UV rays. The result is a composite polymer fabric, fortified both chemically and mechanically against a wide range of natural and man-made damage agents.

VALMEX® boat is a unique material for the manufacture of high-quality inflatable boats used for leisure and recreation.

Four layers of PVC are combined with a Polyester base fabric of high-strength 1100 dtex yarn by melt-roller coating. These single layers give flexibility, elasticity, air-tightness and resistance against mechanical damage to the material. **VALMEX® boat** is wear and abrasion resistant, UV and weather resistant, insensitive to high temperature conditions and dirt-repellent.



The airtightness of the inflatable boat of course depends to a high extent on the correct finish of the seams. Based on our customers' experiences we recommend taping seams inside as well as outside.

The design of products from **VALMEX®** fabric must take into consideration the elasticity of the tube when it is inflated. The tube expands in the radial direction and contracts in the axial direction. For example a tube with a pressure of 0.3 bar (approx. 4.3 psi) gives radial strength twice as high as the axial strength because of deformation.



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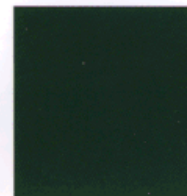
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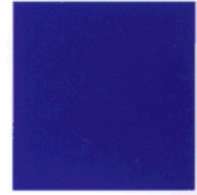
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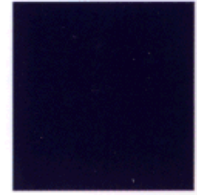
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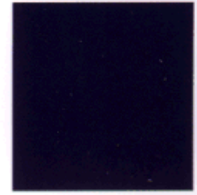
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905

Other colours upon request

VALMEX[®] aqua

Quality fabric for inflatable boats, life rafts, boat covers and boat canopies.

Inflatable boats and life rafts

Inflatable boats are ideal for activities on and in the water as well as for rescue missions. **VALMEX[®] boat**, **POLYMAR[®] boat** and **PLASTEL[®] boat** are special high quality PVC and TPU/PVC coated fabrics that are designed for extreme physical loads.

VALMEX[®] boat is very flexible and nevertheless resistant to mechanical damage, absolutely air and waterproof and extremely temperature resistant. The surface treatment provides for accurate air and waterproof seams as well as deflecting dirt.

POLYMAR[®] boat is a TPU/PVC coated premium product for the manufacture of high quality inflatable boats. It enables to produce large boats with significantly higher safety factors and prolongs a boat's life considerably.

PLASTEL[®] boat is an alternative with same qualities but a lighter weight.

Boat covers, boat canopies and tarpaulin

Boats and yachts must be protected so that they can provide many years of enjoyment as well as to preserve their value. **VALMEX[®] nautica**, **VALMEX[®] pacific**, **VALMEX[®] atlantic** and **VALMEX[®] wind** are high quality, coated polyester fabrics that are tailored to high level appearance and to the extreme stresses of water and weather.

VALMEX[®] nautica light is coated on one side with a special acrylic lacquer for easy to cleaning. The tarpaulin's low weight of 280 g/m² saves a lot of space.

VALMEX[®] nautica double-sided is coated on both side and only weights 430 g/m². The elegant canvas embossing makes the material ideal for Biminis, spray hoods and boat canopies.

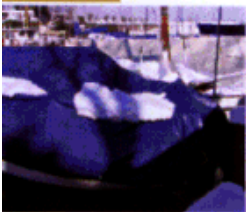
VALMEX[®] nautica heavy weighs 450 g/m². Low wick yarn in the carrier fabric protects against fungus growth and mildew stains. The material is ideal for winter storage.

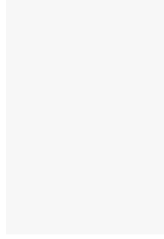
VALMEX[®] nautica linen weighs 400 g/m². The linen embossing lends a very noble character to the material.

VALMEX[®] pacific is a spun dyed and UV stabilizes polyester fabric with an attractive textile fabric surface. It has an acrylic coating and it weighs 390 g/m².

VALMEX[®] atlantic has the same properties like **VALMEX[®] pacific**, but it weighs only 290 g/m².

VALMEX[®] wind has a fluorcarbon finish and has a weight of 250 g/m².





VALMEX® boat	Light	Mainstream	Mainstream plus	Heavy	Heavy plus	Life raft	Life raft
Article	7320	7318	7307	7311	7321	7328	7324
Thickness	0.7 mm	0.8 mm	0.9 mm	1.2 mm	1.2 mm	0.55 mm	0.55 mm
Coating	PVC	PVC	PVC	PVC	PVC	PVC	PVC
Weight	850 g/m ²	1000 g/m ²	1050 g/m ²	1450 g/m ²	1450 g/m ²	630 g/m ²	640 g/m ²
Tensile strength (warp/weft)	2500/2500 N/50mm	3000/3000 N/50mm	3000/3000 N/50mm	3000/3000 N/50mm	3000/3000 N/50mm	2200/2200 N/50mm	3000/2500 N/50mm
Tear strength (warp/weft)	200/150 N	250/250 N	250/250 N	250/250 N	250/250 N	170/170 N	350/300 N
Adhesion	20 N/cm	20 N/cm	20 N/cm	20 N/cm	20 N/cm	20 N/cm	20 N/cm
Cold resistance	-30 °C	-30 °C	-30 °C	-30 °C	-30 °C	-40 °C	-50 °C
Heat resistance	+70 °C	+70 °C	+70 °C	+70 °C	+70 °C	+70 °C	+70 °C
Light fastness	>6 Note	>6 Note	>6 Note	>6 Note	>6 Note	>6 Note	>6 Note
Crack resistance	<100000 x	<100000 x	<100000 x	<100000 x	<100000 x	<100000 x	<100000 x
Width	150 cm	150 cm	150 cm	150 cm	150 cm	180 cm	180 cm

All technical data stated are based on laboratory tests at average results and are provided as a source of information and do not constitute a warranty. Applications suggested here do not release customer from testing material for its intended application. Colours displayed are representative of RAL colour range.

Always check the validity of fire certificate.

Program changes reserved.

VALMEX® is recyclable.

Manufactured by DIN EN ISO 9001

VALMEX[®] boat

VALMEX [®] boat	article no.	weight gr/sqm	thickness mm	width cm
Light	7320	850	0,7	150
Mainstream	7318	1000	0,8	150
Mainstream plus	7307	1050	0,9	150
Heavy	7311	1450	1,2	150
Heavy plus	7321	1450	1,2	150

Technical datasheet No.: 1134.2
Product: VALMEX® inflatable boat - light
Article No.: 7320 5340

Type of coating and finish			
Type of coating	PVC		
Total weight	850 g/m ²	EN ISO 2286-2	
Tensile strength (warp/weft)	2500 / 2500 N/50 mm	DIN EN ISO 1421/V1	
Tear strength (1) (warp/weft)	200 / 150 N	DIN 53363	
Adhesion (1)	20 N/cm	LB 3.04-1	
Cold resistance	-30 °C	DIN 53361	
High Temperature	+70 °C	LB 3.15	
Light fastness	>6 Note, Val.	DIN 54004, DIN EN ISO 105 B02	
Crack resistance (1)	no cracks	< 100000 x	DIN 53359 A
Base fabric			
Material	PES	DIN ISO 2076	
Yarn count	1100 dtex	DIN ISO 2060	
Weave	L 1/1		

These indicated technical data are based on average results. Due to production procedures slight deviations can occur. All technical data are in accordance with the present standard of knowledge and give product information without legal binding. All data apply to new products. Applications suggested do not release the customer to test material for its intended application.

Technical datasheet No.: **1135.2**
Product: VALMEX® inflatable boat - Mainstream
Article No.: 7318 5340

Type of coating and finish			
Type of coating	PVC		
Total weight	1000 g/m ²	EN ISO 2286-2	
Tensile strength (warp/weft)	3000 / 3000 N/50 mm	DIN EN ISO 1421/V1	
Tear strength (1) (warp/weft)	250 / 250 N	DIN 53363	
Adhesion (1)	20 N/cm	LB 3.04-1	
Adhesion (2)	100 N/50 mm	DIN EN ISO 2411 (HF- weld)	
Cold resistance	-30 °C	DIN 53361	
High Temperature	+70 °C	LB 3.15	
Light fastness	>6 Note, Val.	DIN 54004, DIN EN ISO 105 B02	
Crack resistance (1)	no cracks	< 100000 x	DIN 53359 A
Base fabric			
Material	PES	DIN ISO 2076	
Yarn count	1100 dtex	DIN ISO 2060	
Weave	L 1/1		

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Technical datasheet No.: 1137.2

Product: VALMEX® inflatable boat - Mainstream PLUS

Article No.: 7307 5342

Type of coating and finish			
Type of coating	PVC		
Finish	both sides lacquered (dull)		
Total weight	1050 g/m ²	EN ISO 2286-2	
Tensile strength (warp/weft)	3000 / 3000 N/50 mm	DIN EN ISO 1421/V1	
Tear strength (1) (warp/weft)	250 / 250 N	DIN 53363	
Adhesion (1)	20 N/cm	LB 3.04-1	
Adhesion (2)	100 N/50 mm	DIN EN ISO 2411 (HF- weld)	
Cold resistance	-30 °C	DIN 53361	
High Temperature	+70 °C	LB 3.15	
Light fastness	>6 Note, Val.	DIN 54004, DIN EN ISO 105 B02	
Crack resistance (1)	no cracks	< 100000 x	DIN 53359 A
Base fabric			
Material	PES	DIN ISO 2076	
Yarn count	1100 dtex	DIN ISO 2060	
Weave	L 1/1		

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Technical datasheet No.: **1138.2**
Product: VALMEX® inflatable boat - heavy PVC
Article No.: 7311 5340

Type of coating and finish			
Type of coating	PVC		
Total weight	1450 g/m ²	EN ISO 2286-2	
Tensile strength (warp/weft)	3000 / 3000 N/50 mm	DIN EN ISO 1421/V1	
Tear strength (1) (warp/weft)	250 / 250 N	DIN 53363	
Adhesion (1)	20 N/cm	LB 3.04-1	
Cold resistance	-30 °C	DIN 53361	
High Temperature	+70 °C	LB 3.15	
Light fastness	>6 Note, Val.	DIN 54004, DIN EN ISO 105 B02	
Crack resistance (1)	no cracks	< 100000 x	DIN 53359 A
Base fabric			
Material	PES	DIN ISO 2076	
Yarn count	1100 dtex	DIN ISO 2060	
Weave	L 1/1		

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Technical datasheet No.: **1272.2**

Product: VALMEX® inflatable boat - Heavy PLUS

Article No.: 7321 5342

Type of coating and finish			
Type of coating		PVC	
Finish		both sides lacquered	
Total weight		1450 g/m ²	EN ISO 2286-2
Tensile strength	(warp/weft)	3000 / 3000 N/50 mm	DIN EN ISO 1421/V1
Tear strength (1)	(warp/weft)	250 / 250 N	DIN 53363
Adhesion (1)		20 N/cm	LB 3.04-1
Cold resistance		-30 °C	DIN 53361
High Temperature		+70 °C	LB 3.15
Light fastness		>6 Note, Val.	DIN 54004, DIN EN ISO 105 B02
Crack resistance (1)	no cracks	< 100000 x	DIN 53359 A
Base fabric			
Material		PES	DIN ISO 2076
Yarn count		1100 dtex	DIN ISO 2060
Weave		L 1/1	

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