



Scott Bader Scandinavia AB

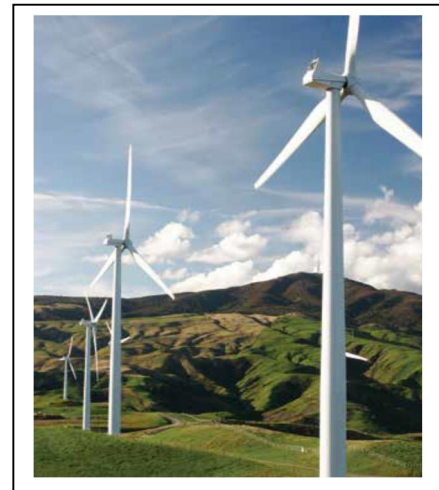
Founded in 1981 as Neidert Trading AB and incorporated in the Scott Bader Group 1992. The Company is situated in Falkenberg, 100 km south of Gothenburg, where we keep our central warehouse for Northern Europe. Scott Bader is a UK leading unsaturated resin producer and as subsidiary we are responsible for sales and marketing in the Scandinavian, Baltic and Icelandic markets. We are also acting as Distributor for several other leading suppliers in Europe and are able to offer a full range of products needed in the GRP Industry.

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CRESTABOND®
 — STRUCTURAL ADHESIVES —

CRYSTIC®

Crestapol®

Scott Bader Scandinavia Product Catalog

3. Resins - Vinyl Esters
4. Crestapol
5. Gelcoat - Topcoat
6. Fireguard Range Gelcoat - Crestomer Adhesives (Urethane acrylate)
7. Bonding Pastes
- 8-9. Crestabond, Structural Adhesives
10. Polyfare air Tooling Compounds
11. Primecoat & Glosscoat
12. Tooling Gelcoat
13. Skincoat , Tooling Resin and Barrier coat
14. Glass fibre mat for Closed Mould products, Matline
15. Vacuum Equipment, Peel Ply
16. Bleeders, Sealant Tape
17. Bagging Materials, Infuplex
18. Bagging Films, Perforated Films and Net Bleeders
19. Adhesive Spray INFUTAC, Spiralnet
20. Reusable Silicon Membranes, Overlay, non-woven fabric
21. RTM Accessories, Leak Detector
22. Infusion Accessories, Connectors
Reinforcement Glassfibre CSM, Roving, Surface Mat, Multiaxial
23. Reinforcements
24. PVC Core, Lycell, Mycell.
25. Filler, Epoxy, Mould Protection
26. Peroxides
27. Rollers, Farecla Polish



CRYSTIC GENERAL PURPOSE RESINS

2-446PA/PALV*	LSE. Rapid wet out. Low exotherm	Orthophthalic
2-420PA/PALV*	LSE. Resin for multi-layering. Low exotherm	Orthophthalic
781PALV	Vacuum Bagging. Rapid hardening and limited exotherm. Pre accelerated resin designed for RTM and RTM Light process.	Orthophthalic Orthophthalic
Crystic 703PA *	Crystic 703PA is a pre-accelerated, DCPD based polyester infusion Resin with low viscosity and controlled exotherm characteristics.	DCPD blend

* Has approval or acceptance by Lloyd's Register of Shipping for use in the construction of craft under their survey.

CRYSTIC HEAT & CHEMICAL RESISTANT RESINS

199	Suitable for high temperature use and electrical applications.	Isophthalic
397PA*	High chemical resistance and High HDT.	Isophthalic/NPG
491PA/489PA*	Thixotropic high performance resin.	Isophthalic
Crystic 474PA	Thixotropic, pre-accelerated orthophthalic polyester resin with good Heat and chemical resistant properties. Suitable for tanks & pipes.	Orthophthalic

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CRYSTIC FIRE RETARDANT UNFILLED RESINS

385PA	Light stabilised resin. BS476 part 7 class 2.	Iso/Heat Acid
9468PA	Fire Retardant resin for RTM / RTM Light	

CRYSTIC FIRE RETARDANT FILLED RESINS

344A and Filler	Halogen and Antimony Free, IMO certified, over and Underground train approvals BS 6853: 1999 fully certified to Category 1a, Full M1 and F0
1355PA	Pre-accelerated, filled, fire retardant polyester, can achieve Class 1 rating to BS476 part 7:1987
9356PA	Variant of 1355PA with no thixotrope and viscosity adjusted for RTM and RTM-Light

For more information on Scott Bader products, visit our website at www.scottbader.com

CRYSTIC VINYL ESTER RESINS

Crystic VE 676/1TP*	Pre-accelerated, thixotropic epoxy bisphenol A based vinyl ester resin for hand lay-up, contact moulding filament winding and other conventional techniques. Crystic VE 676/1TP has excellent chemical resistance to a wide range of substances (acid, alkalis and oxidising agents). It cures with standard catalyst as Butanox M50. Good mechanical properties, HDT 100-102°C. Package 25 kg and 200 kg.
Crystic VE 676-03*	Specially designed for RTM, RTM – Light Vacuum Infusion and centrifugal casting fabrication of fibre reinforced composites for use in many chemical processing industry applications storage tanks, vessels, ducts)
Crystic VE 679PA*	Pre-accelerated, thixotropic, DCPD modified, vinyl ester resin developed for use as a skin coat in marine and tooling applications. Crystic VE 679PA has excellent blister resistance and significantly reduces the occurrence of print through, to produce durable mouldings with an enhanced surface finish.
Crystic VE679-03PA*	Crystic VE 679-03PA developed for use as a infusion resin with a wide range of gel times with various catalysts.

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Crestapol® Resin Systems for Closed Mould Applications

<u>Crestapol 1210/1210A:</u>	A tough low viscosity resin which has a very rapid cure and can be highly filled. Designed for use in RTM, RTM Light and pultrusion applications. The system can be optimised to get very low cycle times of 6-7minutes. Low viscosity, excellent toughness, no post cure required. Crestapol 1210 and Crestapol 1210A are not recommended for open mould applications.
<u>Crestapol 1212:</u>	A tough low viscosity resin which has a very rapid cure and can be highly filled with selected grades of ATH to give very high Level (With 170 parts ATH) of fire & smoke performance. It's designed for use in pultrusion and closed mould applications. It's not recommended for open mould applications. Classifications NFF 16-101, NFP 92-501, M1, F0, EN 45-545 HL2.
<u>Crestapol 1250LV:</u>	Is an ambient curing urethane acrylate thermosetting resin suitable for infusion. The viscosity Of Crestapol 1250LV at room temperature is comparable to typical epoxy resin systems. Very low water absorption compared to Epoxi. Excellent mechanical performance and durability using only moderate temperature post-curing cycles. High temperature performance - Tg 130°C / HDT 109°C
<u>Crestapol: 1080:</u>	It is an excellent base for the formulation of high performance adhesives. Compatible with most unsaturated resins and vinyl esters, and can be added in order to increase impact resistance and flexibility. Pack size 25 kg & 200 kg

FEATURES	
High reactivity Offering the potential for rapid demould times. Elevated temperature moulding will further enhance the cure time.	Pigmentable Fully compatible with polyester pigment pastes.
Mechanical performance The inherent "toughness" of the cured resin matrices results in laminates exhibiting excellent mechanical performance despite the presence of high levels of filler.	Gelcoats and adhesives Fully compatible with Crystic Gelcoats and Crystic Crestomer and Crestabond Adhesives.

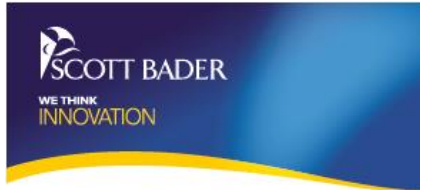
Crestapol® 1250LV Resin Properties and Information

KEY FEATURES OF CRESTAPOL 1250LV

Excellent mechanical performance and durability using only moderate temperature post-curing cycles High temperature performance - Tg 130°C / HDT 109°C Compatible with carbon fibre reinforcement materials and general purpose sizing agents	Excellent surface finish with minimal fibre print through Ability to vary cycle time eliminates the need to stock different resin grades
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Spanish composite part manufacturer, Karbonius, renowned for innovative Carbon / Aramid, moulding, processing and design of high quality composite parts, manufactures Suzuki S1600 Rally Championship Car



Quality & Innovation BUILT IN

- Global manufacturers of;
- CRYSTIC® ADHESIVES
 - ADVANCED GELCOATS
 - CRESTAPOL® RESINS
 - CRYSTIC® MATCHED TOOLING SYSTEM

Over **60** YEARS OF TECHNICAL EXPERTISE



ARIANETECH INGENIERIA, S.L.
 Motorcycle components manufactured using Crestapol® 1250LV, Crystic Crestabond® and Crystic® Gelcoat 253PA

For more information about our range of products, contact us

Scott Bader Scandinavia, Falkenberg, Sweden
 Phone +46 (0) 346 101 00
 Email composites@scottbader.se
 Visit www.scottbader.com

CRYSTIC GELCOATS

Brush Gelcoat

64PA*	Low viscosity gelcoat with excellent weather and water resistance.	Isophthalic
LS88PA*	Much Lower Styrene content, improved weathering performance	Isophthalic
LS31PA*	High performance gelcoat with outstanding weathering performance and gloss retention.	ISO/NPG

Spray Gelcoat

LS-97PA*	Low Styrene. Excellent water and weather resistance.	Isophthalic
LS30PA*	High performance gelcoat with outstanding weathering performance and gloss retention.	ISO/NPG

Crystic Ecogel S1PA

Ecogel S1PA is a very low styrene emission polyester spray gelcoat. Can cut total styrene emission by over 55% compared to using a standard technology polyester spray gelcoat. Crystic Ecogel S1PA is recommended for use in general industrial, land transport and building applications.

Crystic Ecogel S3PA*

CRYSTIC Ecogel S3PA has been specially designed for the production of high quality marine parts. It will provide an excellent hydrolysis resistance combined with a high gloss and colour retention.

G967 SMK

Spray, sanitary high thermal shock resistance
Also available as "Microban"

G976 SMK

Specially designed for the production and protection of GRP swimming pools. It will provide a high chemical and hydrolysis resistance.

Topcoat

X103 KH	Brush. General purpose. Fast curing.	Orthophthalic
LS88PAX*	Brush, low styrene emission, excellent water and weather resistance	Isophthalic
LS97 PAX	Spray. General purpose. Fast curing.	Isophthalic

Gelcoat for epoxy

252PA Brush
253PA Spray

A unique range of polyester gelcoats with exceptional adhesion to epoxy substrates allowing them to be used instead of an epoxy gelcoat Crystic gelcoats has a good epoxy bonding characteristics and designed for use with wet lay and vacuum injected epoxy systems. It's available in wide range of colours. Also

		Viscosity (Pascal)	Geltime* (min)	Specific Gravity	Hardness (Barcol)	HDT (°C)	Tensile Strength (MPa)	Tensile Modulus (MPa)	Elongation at Break (%)
Crystic GC 252PA	Standard grade designed for brush application	Thix	9	1.1	51	71	65	4.3	2.2
Crystic GC 253PA	Standard grade designed for spray application	Thix	9	1.1	42	76	67	3.9	2.2

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Crystic® Fireguard Range

Crystic Fireguard Gelcoat 70PA	New Technology Fire Retardant, Halogen Free Low Smoke and Low Surface Spread of Flame Spray Gelcoat for the Most Stringent Fire Approvals
Crystic Fireguard Gelcoat 72PA	New Technology Fire Retardant Halogen Free Low Surface Spread of Flame Spray Gelcoat

Crystic Fireguard Gelcoat 73PA	New Technology Fire Retardant Halogen Free Low Surface Spread of Flame Brush Gelcoat
Crystic Fireguard Topcoat 75PA Excel	New Technology Intumescent Fire Retardant Topcoat, Available in Both Spray and Brush Grades

Crystic Fireguard Gelcoat 70PA Firestar CEN TS 45545-2 HL2 with Crestapol 1212

Crystic Fireguard Gelcoat 72PA BS 476 Part 7, Class 1 with 1355PA, DIN5510-2 S4, SR2, ST2 with Crestapol 1212 M1 F1 rating with Crestapol 1212

Crystic Fireguard Gelcoat 73PA BS 476 Part 7, Class 2 with 2.3700PA modified general purpose resin

Crystic Fireguard Topcoat 75PA Excel BS 476 Part 7, Class 1 BS476 part 6, Class 0, M1 F1 rating with Crestapol 1212

Crystic Fireguard 75PA (IMS) EXCEL Intumescent Fire Retardant Gelcoat for Spray Application gives outstanding fire protection to FRP laminates which are accidentally exposed to direct flaming. A properly applied, fully cured coating of Crystic Fireguard 75PA (IMS) Excel on a laminate made from standard general purpose resin can obtain a Class 1 rating according to BS476 Part 7.

Crystic Crestomer Structural Adhesives

Stronger Lighter Quicker Tougher

Crystic Crestomer® structural adhesives were formulated specifically for the Fibre Reinforced Plastics (FRP) industry. They are based on Scott Bader's unique urethane acrylate technology and they exhibit exceptional impact strength, flexibility and toughness. Gives performance consistency over a very wide spectrum of temperatures (-5 to 30 degrees °C). Crestomer is used in a wide range of applications across marine, transport, building and construction sectors and offers advantages:

- Facilitation of new design approaches
 - Less need of mechanical fasteners
 - Time Savings and cost reductions
 - Greater efficiency through effective load distribution
- Jointing and sealing in one operation
 - Reduced emissions
 - Weight reductions

Crystic Crestomer Product	Description	Approvals	Appearance	*Gel Time (mins)	Tensile Strength (MPa)	Tensile Modulus (MPa)	Elongation at Break (%)	Performance Characteristics
1152PA	High Performance Structural Adhesive	Lloyds Acceptance DNV RINA	Mauve Gel	*50	26	1400	100	Structural adhesive for demanding applications
1153PA	High Performance Structural Adhesive with longer open time	Lloyds Acceptance	Mauve Gel	*90	26	1400	100	Structural adhesive for demanding applications / larger components
1186PA	Multi Purpose Structural Adhesive	Lloyds Acceptance	Grey Paste	*50	14	800	6	High strength gap filling adhesive
1196PA	Structural Core bonding Adhesive	Lloyds Acceptance DNV RINA	Pink Paste	*50	20	1300	4	Low density adhesive specifically developed for demanding core bonding applications

*2% Butanox® M-50 at 25°C **2% Perkadox® BT-50 at 25°C

Advantage 30	High Performance Structural Adhesive pre-packed in cartridges	Lloyds Acceptance DNV RINA	White Paste	30	15	340	>85	High performance structural adhesive for convenience and flexibility
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The Crystic Crestomer range is available in kegs (pails) with some products also supplied in drums. Crestomer Advantage 30 is packed in 380ml cartridges. Manual and pneumatic guns plus static mixers are also on the product range.

Crystic® General Purpose Bonding Pastes

A range of orthophthalic and isophthalic bonding pastes to suit all applications.

Are suitable for non-structural GRP applications. The extensive range includes both orthophthalic and isophthalic bonding pastes with a variety of product features providing excellent customer choice. The General Purpose Bonding Paste range shows exceptional handling properties and no resin additions are required to ensure good flow. This range has a wide variety of different product benefits:

Range of densities
Range of gel times
Colour change

Low shrinkage
Range of substrates – GRP, wood, stainless steel or aluminium

Name	Description	Geltime	Colour Change	Elongation at Break %	Lap Shear (MPa)	Specific Gravity
ORTHOPHTHALIC						
BP 90-78PA	Fast cure orthophthalic bonding paste	8*	None (White)	1.0	10.5	1.3
BP 90-79PA	Very fast cure orthophthalic bonding paste	4*	None (Grey)	1.3	10.9	1.3
BP 90-80PA	Orthophthalic bonding paste reinforced with glass fibres	12**	Blue to Grey	0.8	9.7	1.3
BP 90-81PA	Lightweight orthophthalic bonding paste with fast cure	8**	Blue to White	1.2	7.3	0.7
BP 90-82PA	General purpose orthophthalic bonding paste	12**	Blue to White	2.8	11.2	1.3
BP 90-83PA	General purpose orthophthalic bonding paste with good flexibility	30**	Blue to White	4.0	9.8	1.3
BP 90-84PA	Lightweight orthophthalic bonding paste with low exotherm	30**	Blue to Cream	6.0	8.2	0.6

ISOPHTHALIC

BP 91-20PA	Good fatigue resistant isophthalic bonding paste reinforced with glass fibres	17*	Blue to Natural	–	–	1.2
BP 91-21PA	Good fatigue resistant isophthalic bonding paste with low exotherm	30*	Blue to Natural	2.5	10.5	1.3

Minimum order quantities may apply.

* 1% Butanox M-50 (or other MEKP catalyst) at 25OC ** 2% Butanox M-50 (or other MEKP catalyst) at 25OC

Crystic® High Performance Bonding Pastes

Crystic® High Performance Bonding Pastes are formulated with the addition of the unique Scott Bader urethane acrylate technology to give a higher technical performance than a standard bonding paste. Applications:

- Where higher performance than a standard Orthophthalic or isophthalic bonding paste is required.
- An alternative to vinyl ester bonding pastes
- When improved fatigue resistance compared to standard bonding paste is needed
- Where structural adhesives are over specified

Crystic 621CC65* Urethane modified, low shrink 0, 2%, good elongation 4%

Iso/Hybr

Crystic 90-85* Equal properties as 621 with higher viscosity.

Iso/Hybr

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CRYSTIC[®]
CRESTABOND[®]
 — STRUCTURAL ADHESIVES —

CRESTABOND[®]
 — STRUCTURAL ADHESIVES —

Scott Bader are a global company with over 25 years experience in designing high quality adhesives and over 60 years experience of composites manufacturing.

Scott Bader benefits from an industry-leading technical support team available to assist customers with technical advice.

Scott Bader also boasts in-house laboratory testing facilities allowing for rapid response to customer requests.

The Crestabond[®] range of adhesives is a range of 1:1 and 10:1 MMA structural adhesives unique to the market due to the primer-less technology.

The Crestabond[®] range of adhesives benefits from a range of working times to suit different applications.



Market Applications

✓	MARINE	<i>from kayaks to super yachts</i>
✓	LAND TRANSPORTATION	<i>buses, coaches, trains and trucks</i>
✓	BUILDING & CONSTRUCTION	<i>doors, windows and cladding</i>
✓	WIND ENERGY	<i>blades, housing and nacelles</i>
✓	RECREATIONAL VEHICLES	<i>motorhomes and caravans</i>
✓	AGRICULTURAL VEHICLES	<i>tractors, diggers and combine harvesters</i>

Adhesive Selection Guide

Selection of the appropriate product is essential for long-term adhesion and durability.

Product	Description	Colour	Mix ratio by volume	Viscosity (cP)	Working Time (mins)	Fixture Time (mins)	Tensile Elongation (%)	Tensile Strength (MPa)	Tensile Modulus (MPa)	Gap Fill (mm)
M1-04	Universal Bonder	Grey	10:1	100,000 - 140,000	3 - 5	8 - 10	70	14 - 17	400 - 600	1 - 15
M1-05	Universal Bonder	Grey or Black	10:1	100,000 - 140,000	4 - 7	12 - 18	70	14 - 17	400 - 600	1 - 15
M1-20	Universal Bonder	Grey or Black	10:1	100,000 - 140,000	14 - 22	25 - 35	70	16 - 19	600 - 850	1 - 25
M1-30	Universal Bonder	Grey or Black	10:1	200,000 - 240,000	25 - 35	60 - 80	>100	17 - 20	750 - 1000	1 - 50
M1-60	Universal Bonder	Grey	10:1	200,000 - 240,000	50 - 70	150 - 180	>100	16 - 18	650 - 850	1 - 50
M1-90	Universal Bonder	Grey	10:1	200,000 - 240,000	80 - 100	210 - 240	>100	16 - 18	650 - 850	1 - 50
M7-05	Universal Bonder	Off White	1:1	30,000 - 70,000	4 - 7	18 - 22	44	23 - 26	1300 - 1700	1 - 5
M7-15	Universal Bonder	Off White	1:1	30,000 - 70,000	10 - 20	30 - 45	43	20 - 23	1400 - 1700	1 - 5

GRP	STAINLESS STEEL	ALUMINIUM	POWDER COATED STEEL	COLD ROLLED STEEL	ABS	ACRYLIC	POLYCARBONATE	GALVANISED
✓✓	✓✓	✓✓	✓✓	✓✓	✓	✓✓	✓	
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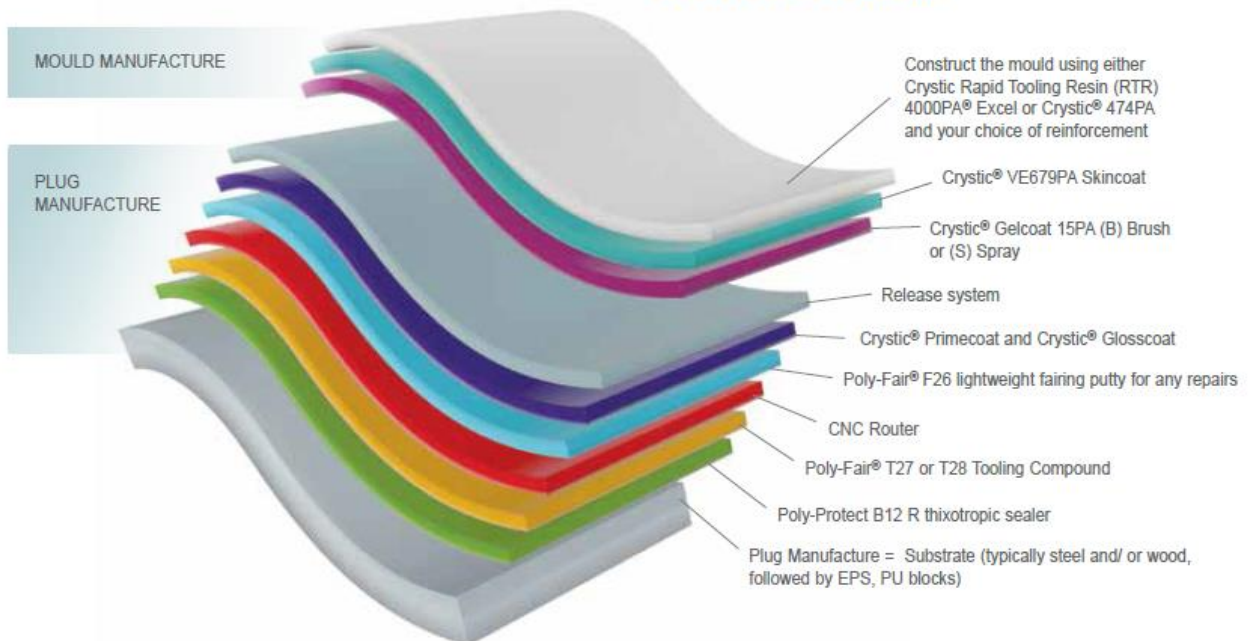
Multiple ticks denote exceptional suitability

Crestabond® features Customer benefits

✓	PRIMER-LESS ADHESIVES	▶	<i>Dramatically enhances production efficiency and reduces consumable costs</i>
✓	Minimal surface preparation	▶	<i>Reduces dust emissions and preparation time</i>
✓	Excellent fatigue and impact resistance	▶	<i>Confidence in the longevity of the finished product</i>
✓	Range of working and fixture times	▶	<i>Optimise production cycles to reduce manufacturing costs</i>
✓	Good gap filling capability	▶	<i>Adhesive can be used in multiple applications</i>



Overview Diagram



POLY -FAIR® Tooling Compounds for CNC Machining

Scott Bader – ATC now has the innovative Poly-Fair T27 and T28 Tooling Compounds as part of its range. Successfully used for over 16 years, these are modified polyester-based sprayable and extrudable tooling pastes used for CNC Moulds, patterns, plugs and direct moulds (LPMs – Limited Production Moulds). It is a viable alternative to the epoxy and urethane tooling pastes offering the flexibility, ease of use and efficiency of polyester chemistry processed with standard, off-the-shelf RAM-type dispensing equipment.



TYPICAL PROPERTIES		
	T27	T28
Colour	Pink	Beige / Tan
Density (g/cc)	1.07	0.78
Density (lb/gln)	8.9	6.45
Viscosity, cps (Brookfield HAS)	206,000	300,000
Shrinkage	-	<1%
Catalyst, Luperox DDM9	1.8%	2%
Gel Time, 24°C	18 Minutes	40 Minutes
Peak Exotherm °C*	132°C	110°C

*100 gram mass at 75 Minutes

Crystic Primecoat & Glosscoat 'Plug preparation & finishing' High Build Polyester coating Material

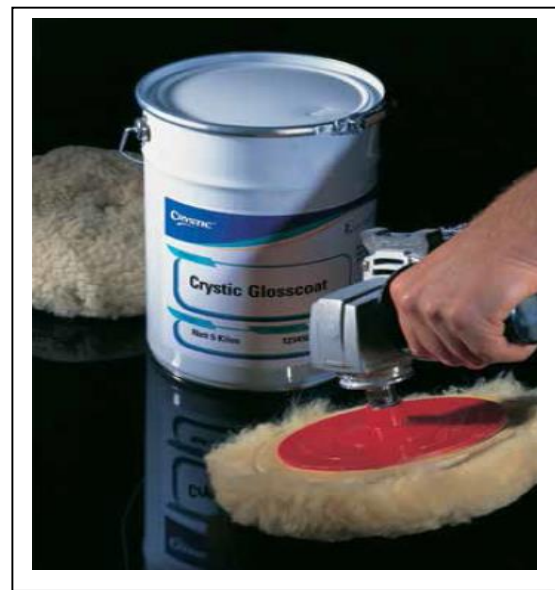
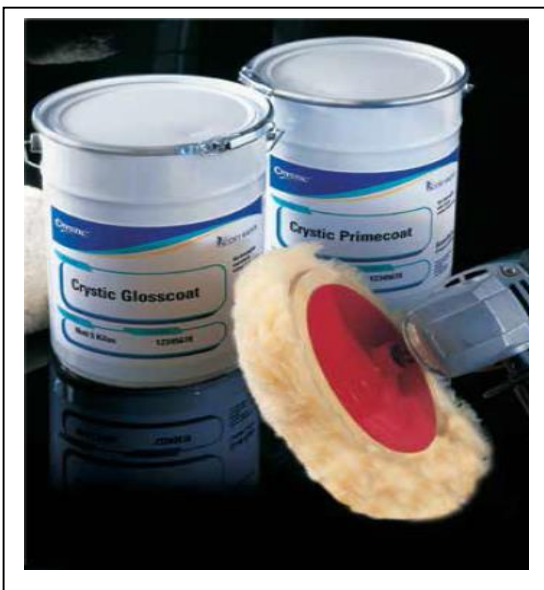
Crystic Primecoat allows the rapid surfacing of patterns constructed of wood, mdf, grp or Poly-Fair products. It can be applied wet-on-wet up to a thickness of 1.5mm in one operation without sagging or drainage from vertical surfaces. It is designed for spray application but can be applied by brush. The material has a quick hardening rate and can be easily sanded to a smooth finish, which can in turn be polished to achieve high levels of gloss. If a superior level of gloss is required it can be surfaced with Crystic Glosscoat.

Crystic Glosscoat Polyester coating for use with Primecoat

Crystic Glosscoat is designed to be applied over prepared Crystic Primecoat to give a glossier and more durable surface.

Key benefits to Crystic Primecoat and Glosscoat

- ~ Can be sprayed via a gravity feed gun
- ~ Excellent build up without sag on vertical surfaces
- ~ Fast curing and easily sanded
- ~ Polishes to a super smooth, gloss finish
- ~ Ideal for all standard pattern / plug making materials
- ~ Can be blended with low density fillers



MOULD Manufacture



For information on part manufacture please refer to the appropriate Scott Bader product guides

Crystic Gelcoat 15PA (B) & (S)

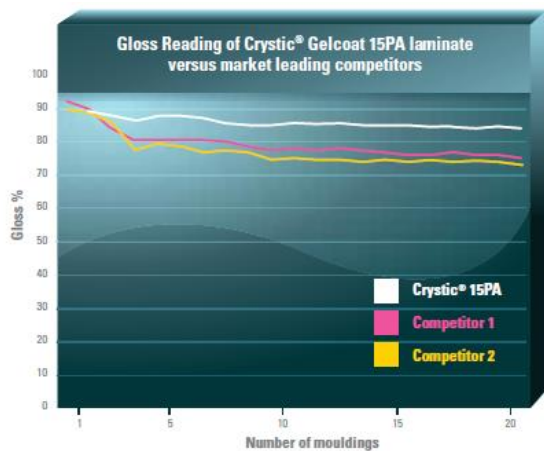
Crystic Gelcoat 15PA, both brush and spray, represent the highest quality in tooling gelcoat manufacture. A superior vinylester resin technology offers a premium finish with exceptional resistance to chemical attack and extremely long life cycles and multiple pulls.

Crystic Gelcoat 15PA (B)

High performance Vinylester tooling gelcoat, which has excellent gloss retention and exceptional resilience. It has good chemical resistance and offers a genuine solution to the problem of 'water marking'. It also reduces general reinforcements print-through. Crystic 15 PA is available in black, green, red and unpigmented HDT 118°C

Crystic Gelcoat 15PA (S)

Tooling gelcoat, spray version, Easy to spray and achieve good coverage. Superior gloss retention in use after multiple pulls from the mould. Available in black, green, red and unpigmented.



Very easy to spray with, covers nicely and no sagging. The degassing is perfect and no pinholes were found even after sanding the surface of the gel coat. But where it really out performs the competition is in achieving excellent resistance to print-through when vacuum bagging a 2 x 2 twill carbon fabric of 200 gm⁻² with epoxy resin.

Alejandro Castro,
Resinas Castro, S.L.

TYPICAL PROPERTIES FOR CRYSTIC 15PA S & B			
When tested in accordance with the appropriate BS or BS EN ISO method			
		15PA (S)	15PA (B)
Viscosity at 25°C		Thixotropic	Thixotropic
Volatile Content	%	40	30
Geltime at 25°C (using 2% Butanox M50)	Minutes	7	11
Stability in dark at 20°C	Months	3	3



To find out more about CRYSTIC Matched Tooling Systems contact us on +46 (0)346 101 00 or mail to:

composites@scottbader.se

Crystic Skincoat VE679PA

An easy to use Vinyl ester / DCPD skincoat which significantly reduces the occurrence of fibre print through. Crystic 679PA greatly enhances surface finish on mouldings. HDT 94°C Elongation 2, 1 %.

TYPICAL LIQUID PROPERTIES

Appearance		Red/Brown
Viscosity at 25°C 4500 sec ⁻¹	Poise	2.3
Viscosity at 25°C 37.35 sec ⁻¹	Poise	3.5
Specific Gravity @ 25°C	-	1.065
Stability at 25°C	Months	3
Geltime at 25°C using 2% Butanox LPT	Minutes	18
Geltime at 25°C using 2% Butanox M50	Minutes	23

FULLY CURED RESIN

		*Post Cure	**Post Cure
Barcol Hardness (GYZJ 934 – 1)		23	25
Deflection Temperature Under Load † (1.80 MPa)	°C	60	94
Water Absorbion 24hrs at 23°C	mg	10	15
Tensile Strength	MPa	60	52
Tensile Modulus	GPa	2.7	3.0
Elongation at Break	%	4.3	2.1
Specific Gravity at 25°C	-	1.161	1.158

*Curing Schedule . 24hrs at 20°C, 16hrs at 40°C
 ** Curing Schedule . 24hrs at 20°C, 3hrs at 80°C
 † Curing Schedule . 24hrs at 20°C, 5hrs at 80°C, 3hrs at 120°C

RTR 4000PA Excel

Crystic RTR 4000PA Excel is a new, improved rapid tooling resin which incorporates better handling, lower viscosity, improved shrinkage control and ease of use. For the manufacture of high quality, low profile mould making applications.

LIQUID PROPERTIES

Viscosity at 25°C (ICI Cone and Plate)	Poise	5
Specific Gravity at 25°C	-	1.35
Volatile Content	%	29
Geltime at 25°C (1% Butanox M-50) **	Minutes	40
Stability (at less than 20°C in original container)	Months	3

TYPICAL MECHANICAL PROPERTIES

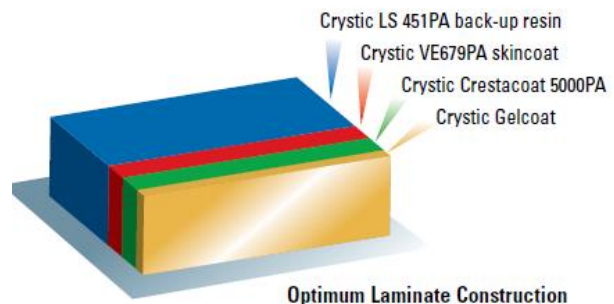
HDT**	°C	63
Tensile Strength*	MPa	114
Tensile Modulus*	GPa	8.1
Elongation at break*	%	2.0

*Glass Content 28%, laminate made with 3 layers of 450gsm CSM; 16hrs at 40°C post cure
 **Property of the cast resin, 16hrs at 40°C post cure

Barrier Coat, Crystic Crestacoat 5000PA

A Pre-Accelerated Urethane Acrylate technology unique to Scott Bader.

Crystic Crestacoat 5000PA is designed to be used behind a standard gelcoat and should be applied when the gelcoat has reached sufficient cure for normal lamination to take place. It can be brushed or sprayed to a thickness of 1mm. It is recommended that the barrier gel layer is as even as possible. As a guide, approximately 600g/m² of Crystic Crestacoat 5000PA will give the required thickness when evenly applied.



TR 104 Hi-Temp Wax

Often referred to as Blue wax, it is ideal for thicker laminates, is easily applied, and gives reduced build up due to the carnauba base.





CLOSED MOULD PRODUCTS

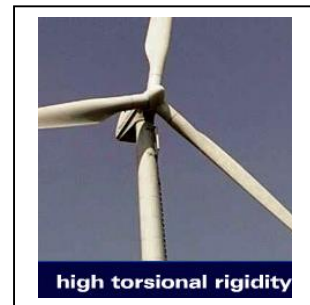
FLOWMAT

Is a duplex glass fibre mat stitch-bonded with a polypropylene fleece in the middle. Flowmat features extremely good drape ability and elongation in combination with a quick impregnation and an optimal resin absorption and distribution. It is available in thicknesses from 2-6 mm with a weight of up to 2000g/m².

Characteristics

Good deformability
Compressibility
Easy resin flow
Good surface finish
Sandwich-type composite
Good mechanical properties in flexion

Cold pre-shaping
Easy-to position reinforcements
High wetting capacity
Flexibility
High temperature resistance
Increased productivity



Product identification example

Article	Weight g/m ²	Width cm
180/200	380	127
180/300	480	127
200/180/200	580	127
300/180/300	780	127
300/250/300	850	127
375/180/375	930	100/154
450/180/450	1080	127
450/250/450	1150	127/254
600/180/600	1380	127
600/250/600	1450	127
700/250/700	1650	127

Ex. 300/250/300:

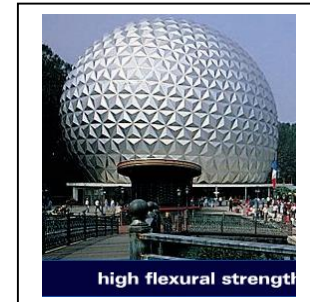
300gr CSM/250gr pp-core/300gr CSM,

Tot: 850gr/m² (Stitched together.)

Ex. 450/180/450:

450gr CSM/180gr/180gr pp-core/450gr CSM

Tot: 1080gr/m² (Stitched together.)



MATLINE+

It is a fully mouldable core material and is compatible with most resin systems to produce lightweight sandwich panels. New Improved quality offering: Better dry drivability, resin consumption, Better adherence on vertical applications

Available thickness; 1mm, 2 mm, 3 mm, 4 mm and 5 mm

Product Reference: Matline 100+
Matline 200+
Matline 300+
Matline 400+
Matline 500+





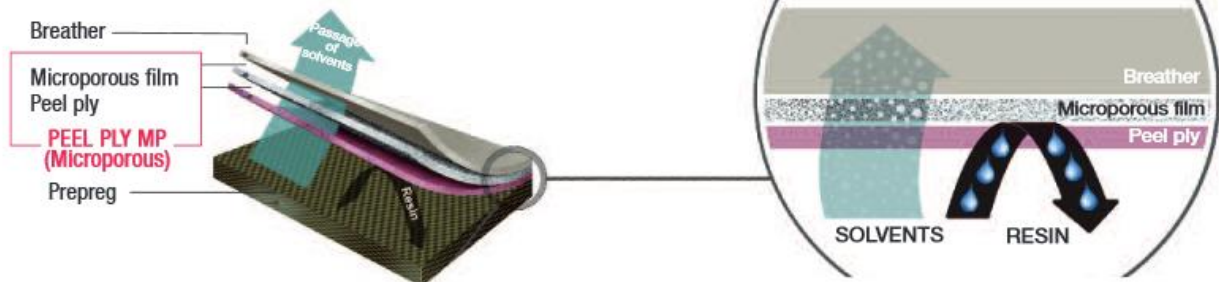
VACUUM MOULDING È VACUUM INFUSION È RTM È RTM LIGHT VACUUM EQUIPMENT

Peel ply

Complete range of peel plies : from 64 to 185 gr/m², dyed, white or undyed with stripes, polyamide or polyester, bands or full Width. Peel ply "PA85" is the standard quality, tafetas weave, 85 gr/m², white with stripes. Peel plies are used to impart a textured surface to the moulded component to improve adhesion in secondary bonding or painting. We are able to manufacture your own peel ply with specific characteristics. All our peel plies are treated in order to remove all pollutant products (like silicones for example) which could contaminate the laminate.



Peel ply MP (Microporous)



Peel ply MP is a microporous multilayer system used in manufacturing processes for vacuum moulding of composite materials with techniques such as : prepreg, wet lay-up and thermoplastic. The perforated film is now replaced by a microporous film full of tiny pores. Under vacuum the liquid (resin), can't pass through the film, excepted the gases.

Peel Ply Complete range of peel plies, from 64 to 185 gr/m²

Product	Max. temp.	Weight	Width	Length	Type	Colour	Characteristics/ Use
PA64	190°C	64 gr/m ²	1.57 m	100 m	Polyamide	White / Red stripes	Thin surface/Elastomere
PA80	185°C	80 gr/m ²	1.56 m	100 m	Polyamide	White / Red and blue stripes	Economic
PA80 MP	120°C	117 gr/m ²	1.50 m	50 m	Polyamide + MP film	White / Red and blue stripes	Prepregs low temperature
PA80 AD	185°C	80 gr/m ²	1.56 m	100 m	Polyamide + Adhesive	White / Red and blue stripes	Adhesive Peel ply
PA80 Fluo	185°C	83 gr/m ²	1.63 m	100 m	Polyamide	Yellow / Red and blue stripes	Carbon
PA85	185°C	85 gr/m ²	1.60 m	100/500 m	Polyamide	White / Blue stripes	Standard
PA90	185°C	90 gr/m ²	1.56 m	100/500 m	Polyamide	Pink / Blue stripes	Carbon
PA91	200°C	91 gr/m ²	1.60 m	100 m	Polyamide	White / Red stripes	Hand lay up / Infusion
PA95	185°C	104 gr/m ²	1.56 m	100/500 m	Polyamide	White / Blue stripes	Bonding
PA95 ST	185°C	104 gr/m ²	1.56 m	100/500 m	Polyamide	White	Bonding
PA100	185°C	107 gr/m ²	1.56 m	100/500 m	Polyamide	Pink / Blue stripes	Carbon
PA100 ST	185°C	107 gr/m ²	1.56 m	100/500 m	Polyamide	Pink	Carbon
PA100 ST MP	180°C	144 gr/m ²	1.50 m	50 m	Polyamide + MP film	Pink	Carbon
PA105	185°C	105 gr/m ²	1.60 m	100 m	Polyamide	White / Blue stripes	Developed shape
PES85	210°C	85 gr/m ²	1.64 m	100/500 m	Polyester	White	Phenolic
PES90	210°C	90 gr/m ²	1.64 m	100 m	Polyester	White / Orange and green stripes	Polyester Phenolic & elastomere
PES90 MP	180°C	130 gr/m ²	1.50 m	50 m	Polyester + MP film	White / Orange and green stripes	Phenolic
PES105	210°C	105 gr/m ²	1.60 m	100/500 m	Polyester	White	Developed shape
DIATEX 1500 EV6	200°C	99 gr/m ²	1.74 m	100 m	Polyester	White	Structural bonding
DIATEX 1500 EV6 MP	180°C	136 gr/m ²	1.50 m	50 m	Polyester + MP film	White	Structural bonding
DIATEX 2000 EV6	200°C	139 gr/m ²	1.80 m	100 m	Polyester	White	Structural bonding

Bleeders and breathers (non woven)

Non woven breather and bleeder felts made of polyester fibers. These are recommended for the moulding of elaborate forms. These bleeders are recommended for the vacuum technology with preregs in autoclave. PES340 FR (Fire Retardant) is a bleeder/breather for high pressure and temperature cures. This non woven bleeder is made of polyester fibre which has undergone a special treatment against fire. It allows to limit the risk of fire during autoclave process.



Product	Max. temp.	Weight	Width	Length	Elongation	Pressure	Type	Fire retardant
PES 150	205°C	150 gr/m ²	1.55 m	100 m	Very good	3 bars	Polyester	No
PES 200	205°C	200 gr/m ²	1.55 m	100 m	Very good	4 bars	Polyester	No
PES 340	205°C	340 gr/m ²	1.55 m	50/100 m	Good	7 bars	Polyester	No
PES 440 HDTEX	205°C	440 gr/m ²	1.55 m	50 m	Good	9 Bars	Polyester HDTEX	No
PES 150 FR	205°C	150 gr/m ²	1.55 m	100 m	Very good	3 bars	polyester	Yes
PES 340 FR	205°C	340 gr/m ²	1.55 m	50 m	Good	7 bars	polyester	Yes

Other width available under request

Sealant tapes

Preformed sealants for the production of flexible seals. Sealant tapes are used to form a seal between the vacuum bagging film and the mould tool surface. Easy to implement, they don't dirty the tools. Compatible with most vacuum films and resins. Very good chemical resistance. Contact us for sealant tapes to be used up to 400°C.



Product	Temp.	Dimensions	Roll	Colour	Use
LSM6000	90°C	0.3 cm x 1.3 cm x 13 m	22	Brown	Low temperature
LSM6013	90°C	12 mm x 3 mm x 10 m	22	Brown / Black	Debulking, double tack
LSM3000Flex	90°C	50 mm x 1.5 mm x 10 m	8	Grey	DIADRAIN MP sealing
LSM1310	110°C	0.25 cm x 1.2 cm x 15 m	22	Black	Medium temperature, hyper tack
LSM5200	140°C	12 mm x 2.5 mm x 15 m	10	Black	High tack
SM5127	205°C	0.32 cm x 1.27 cm x 7.62 m	40	Black	Standard
LSM7000	210°C	0.3 cm x 1.2 cm x 12.50 m	22	Yellow	High temperature, soft
SM5126	232°C	0.32 cm x 1.27 cm x 9.15 m	32	Black	High temperature
SM5160	371°C	0.32 cm x 1.27 cm x 9.15 m	24	Brown	Thermoplastic

Accessories and pipes

Discover all items on :

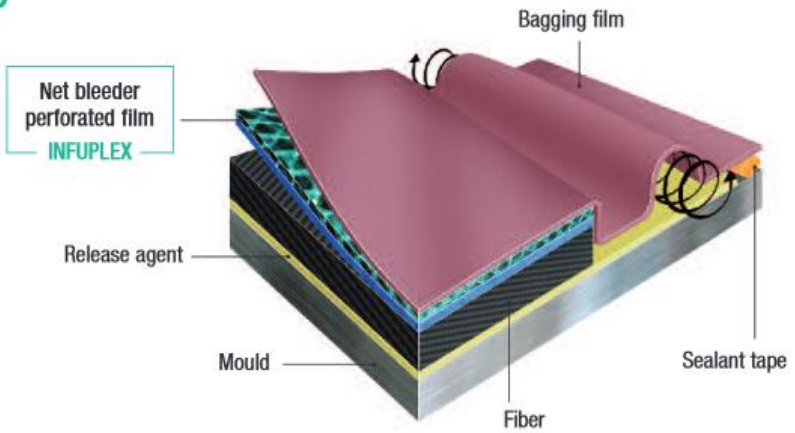
 www.diatex.com



Bagging materials

Optimized system by DIATEX

DIATEX provides technical support to select bagging materials in order to optimize the infusion process.



INFUPLEX

INFUPLEX is an innovative product created by DIATEX in 2007 which marks the evolution of the lamination process by infusion.

The infusion process involves the successive implementation of bagging materials such as :

- Peel ply
- Perforated release film
- Net bleeder

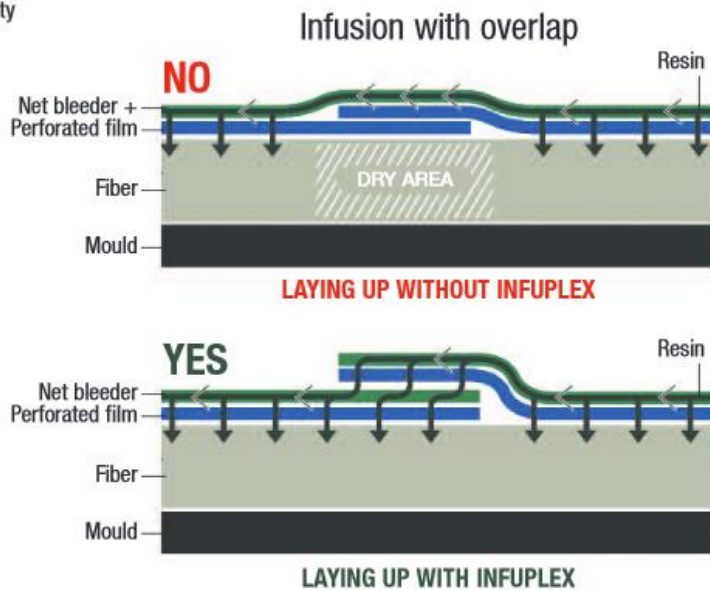
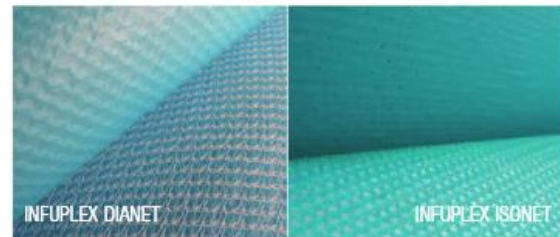
The standard procedure makes this implementation time consuming, difficult and has many draw-backs :

- Overlapping issue
- Over-use of spray adhesive
- Many cuts and successive operations : loss in productivity

INFUPLEX combines 2 of the 3 layers mentioned above in one product : perforated film and net bleeder. To be positioned directly on the part or on the peel ply, INFUPLEX removes the risk of forgetting the perforated film, of overlapping issues and ensures ease of use.

Benefits :

- Less waste
- Available in ISONET, OM70 and DIANET versions : different flow speeds
- Impregnation without defect
- Porosity of the additional layers unchanged/stable
- No risk of omissions
- No risk of dry areas due to overlaps
- Easy to use
- Reduces use of spray adhesive
- Increases the productivity
- Possibility of INFUPLEX high temperature 200°C



Product	Net bleeder	Perforated film	Resin flow speed	Use with resin
INFUPLEX ISONET	ISONET - 115 gr/m ²	ELA20 P1	Average	E,VE Polyester
INFUPLEX OM70	OM70 - 185 gr/m ²	ELA20 P1	Speed	E,VE Polyester
INFUPLEX DIANET135	DIANET135 - 135 gr/m ²	ELA20 P1	High speed	E,VE Polyester
INFUPLEX FLONET	FLONET - 112 gr/m ²	ELA20 P0	Very high speed	E,VE Polyester
INFUPLEX OM 70 PA	OM70 PA - 220 gr/m ²	PMP200 P1	Speed	Epoxy HT
INFUPLEX DIANET PA	DIANET PA - 125 gr/m ²	ETFE P1	High speed	Epoxy HT

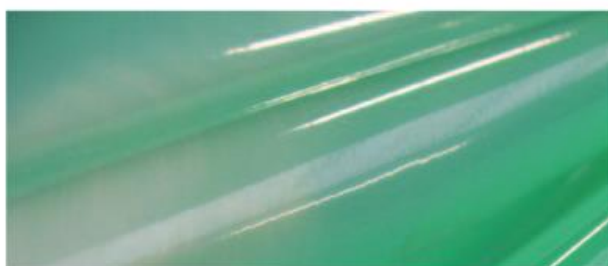
E : epoxy VE : vinylster

Bagging films

P0120 and P0180 are new generation extra large extruded advanced copolymer films. They offer exceptional conformable characteristics, particularly when applied to awkward shapes with deep recesses or undercuts.

They allow the moulding of complex forms. They have release properties and can be used in direct contact with the resin.

P0120 can be offered up to 16 m width unwelded. Styrene resistant and non porous films can be used for both vacuum moulding or vacuum infusion technologies with epoxy or polyester.



Product	Max. temp.	Thickness	Width	Length or surface	Vacuum elongation	Auto-release	Use with resin*
P0120	120°C	80 µ	12 / 16 m	25 / 30 / 53 m	400 %	Yes	E, P, VE, PH, EL
P0120	120°C	75 µ	2 / 4 / 6 / 8 / 10 m	+/- 800 m ²	400 %	Yes	E, P, VE, PH, EL
P0150YJ	150°C	65 µ	1.5 / 2.8 / 4.57 m	170 / 216 m	400 %	Yes	E, P, VE, PH
P0160 TUBE	160°C	70 µ	86 / 100 / 110 / 125 / 150 200 / 300 / 350 / 400 mm	200 m	350 %	Yes	E, PH
P0175	177°C	50 to 75 µ	1.5 to 12 m	75 to 400 m	365 %	Yes	E, P, VE, EL
P0180	180°C	50 to 75 µ	3 / 4 / 5 / 6 m	+/- 800 m ²	360 %	Yes	E, P, VE, PH, EL
P0180 TUBE	180°C	50 to 75 µ	0.31 / 0.60 / 0.80 / 1.2 m	200 m	360%	Yes	E, P, VE, PH, EL
CAPRAN 518	204°C	50 µ	2.54 / 3.15 / 4.06 m	152 / 305 m	415 %	Yes	E, P, VE, EL
CAPRAN 518 TUBE	204°C	50 µ	1.52 m	305 m	415 %	Yes	E, P, VE, EL
PA205	205°C	50 to 75 µ	0.8 to 4.57 m	250 m	Poor	Yes	E, P, VE, EL
PA232	232°C	50 to 75 µ	1.55 to 3.1 m	250 m	Poor	Yes	E, P, VE, EL

Resin code : E = epoxy - P = polyester - VE = vinylester - PH = phenolic - EL = elastomer - TP = thermoplastic.

Perforated films

The high density perforation is controlled by special equipment that guarantee a quality of perforation made by hot needles throughout the manufacturing process.



PP40 PERFORATED P1

Product	Max. temp.	Thickness	Width	Length	Elongation	Colour	Perforation	Type
ELA20	125°C	25 µ	1 & 1.45 m	400 m	300 %	Blue	P1	HDPE
PP40	160°C	40 µ	1.60 m	200 m	700%	Red	P1	PP
PMP200	200°C	30 µ	1.50 m	200 m	330%	Red	P1	PMP
ETFE230	230°C	20 µ	1.50 m	150 m	300%	Blue	P1	ETFE

N = non perforated - P1 = perforated P1 (large) - P3 = : perforated P3 (small).

Net bleeders for infusion

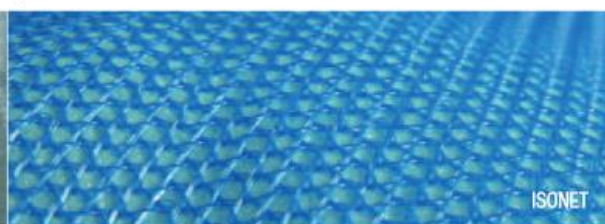
DIATEX proposes knitted net bleeders made of polyethylene yarns. Several constructions are available providing different flow resin speeds. In order to meet a rising demand for high temperature vacuum infusion solutions, Diatex has developed a specific range of net bleeder withstanding temperature up to 200°C. Based on

polyamide, these net bleeders have been heat set in order to avoid the rolling up of the flanges.

These products do not contain oil, silicon or any other pollutants from production process. They enable a high productivity for large parts.



DIANET 135



ISONET

Product	Max. temp.	Thickness	Width	Length	Weight	Colour	Type	Resin flow speed
ISONET	90°C	900 µ	2 / 4 m	100 / 50 ml	115 gr/m ²	Blue	CO PE	Average
OM 70	90°C	1117 µ	2 / 4 m	100 / 50 ml	180 gr/m ²	Black/green	PE	Speed
DRAIKO	90°C	1066 µ	2 / 4 m	100 / 50 ml	105 gr/m ²	Black	PE	High speed
DIANET 135	90°C	1190 µ	2 / 4 m	100 ml	135 gr/m ²	Green	CO PE	High speed
FLONET	90°C	1100 µ	2 / 4 m	100 / 50 ml	112 gr/m ²	Yellow	CO PE	Very high speed
DIANET PA	200°C	1050 µ	2 m	100 ml	125 gr/m ²	White	PA	High speed
OM 70 PA	200°C	1100 µ	1.45 m	100 ml	220 gr/m ²	White	PA	Speed

Adhesive spray : INFUTAC

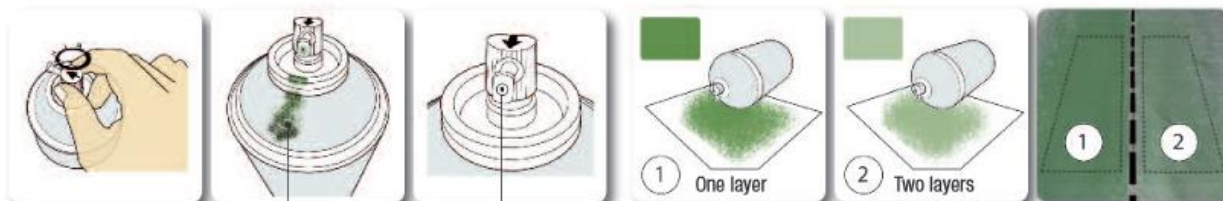
INFUTAC is made for the assembly of dry reinforcements and vacuum devices in vacuum infusion and RTM processes.

- Holding of hybrid materials
- Optimal adhesion during the molding
- Low drying shrinkage
- Exact application thanks to a ultrafine spraying and a green tracer
- High instantaneous adhesion

INFUTAC adhesive made for the vacuum infusion process, ensures a perfect adhesion of the reinforcements during the molding. The glue does not interfere on the surface quality and surface quality and structural integrity.



Box of 12 aerosols



Flow control thanks to a regulation button L (low), M (medium), H (high).

Green tracer

Unblocked nozzle

1 One layer

2 Two layers

All INFUTAC sprays are supplied with adjustable spray flow nozzle

Available Quantities

INFUTAC CLEAR (transparent) is available in spray of 500 ml

INFUTAC GREEN (green color) is available in 2 volumes/spray (500/610 ml) and 3 volumes/canister (19/63/125 L)

PRODUCT	SPRAY	SPRAY	SPRAY	CANISTER	CANISTER	CANISTER
VOLUME	500 ml	610 ml	500 ml	19.1 L	63.5 L	131.5 L
CAN	Consumable	Consumable	Consumable	Consumable	Safety cans (recovery by DIATEX)	Safety cans (recovery by DIATEX)
NB/PALLET	1080	1080	1080	36	9	2

PRODUCT	INFUCLEAN	PIPE	GUN	VALVE
CHARACTERISTICS	4.7 L Consumable	3.66m / 5.5m Reusable	Delivered with nozzle 9501 Reusable	Compatible pipe Reusable



Gun for Infutac Aerosol

www.diatex.com

SPIRALNET

When using a spiral tube as a resin line in vacuum infusion process, one of the biggest issue is the marking of the laminate. In order to get rid of this problem, DIATEX developed a ready to use advanced solution : SPIRALNET.

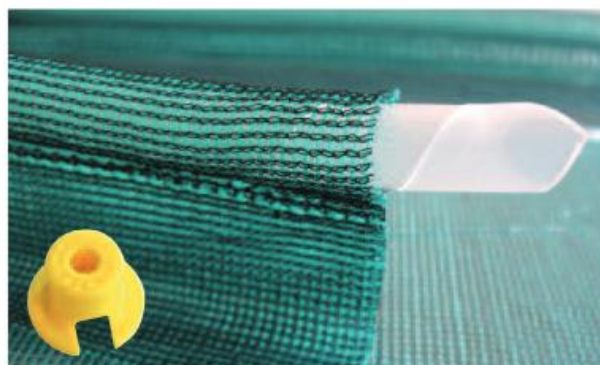
This product combines a tube mesh together with a spiral tube in order to optimize the resin distribution and avoid the marking of the laminate during the infusion process.

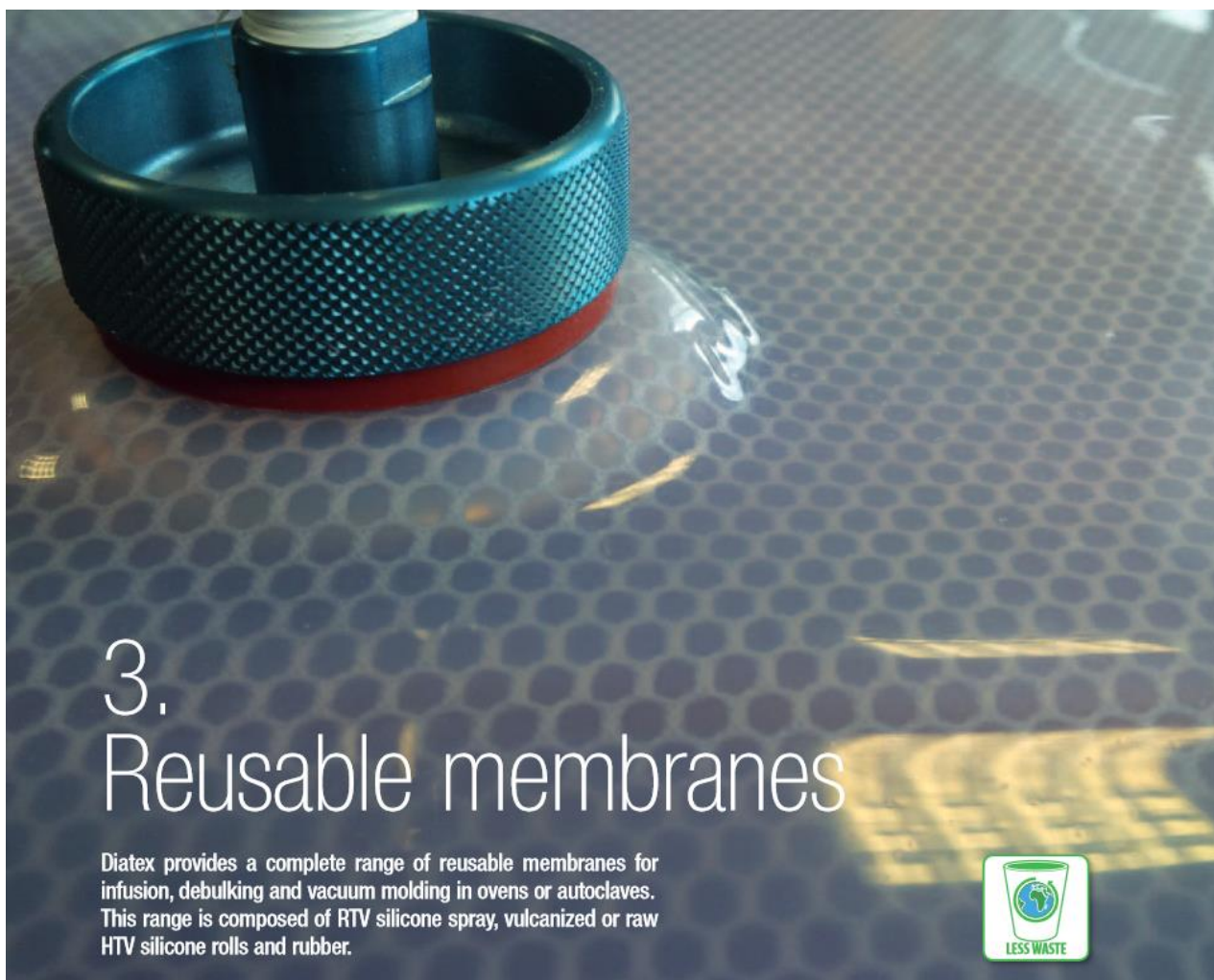
SPIRALNET can be also used as vacuum line.

It can replace the mould flange when this one is too narrow.

Technical characteristics :

- No marking of the laminate
- Ready to use
- Standard supply : rolls of 100 lm
- Spiral tube 12 x 14 mm
- Infusion net OM70
- Can be used with all nets
- Max service temperature 90°C
- Assembly technology : welded





3. Reusable membranes

Diatex provides a complete range of reusable membranes for infusion, debulking and vacuum molding in ovens or autoclaves. This range is composed of RTV silicone spray, vulcanized or raw HTV silicone rolls and rubber.



Our range

Reference	Shore Hardness(A)	Vulcanized	Non Vulcanized	Type	Packaging	Thickness	Color
DIASIL 20	20		x	RTV Spray	25 Kg A + 25 Kg B		Purple
DIASIL 45	45	x	x	HTV	1.30 m x X ml	1.5 mm	Grey
DIASIL 50	50	x	x	HTV	1.40 m x X ml	1.5 mm	Blue
DIASIL 60	60	x		HTV	1.20 m x X ml	0.5 mm	Translucent
ELASTIBAG	40	x		Latex	1 m x X ml	0.55 mm	Yellow
PARABLOND	45	x		Rubber	1.40 m x X ml	1.0 mm	Brown

Diatex is able to manufacture silicone tools

- Silicone tools for infusion (DIASIL 20)
- Silicone zipped bags (DIASILBAG)
- Silicone tools on metal frame

DIASIL 45, 50 and 60 silicone and ELASTIBAG and PARABLOND are sold by rolls or LM

Overlay

This overlay is a non woven fabric. It improves the aspect of laminates when applied on direct contact with the mould or on a gel coat. This non woven overlay has a high porosity and elongation which improves good air and resin flow.



ACR 65

Product	Colour	Weight	Weave	Width	Length	Elongation
ACR 65	White	65 gr/m ²	non woven	From 1.50 to 3.5 m - Standard 1.5 m	200 ml	110 %

RTM ACCESSORIES

Injectors : 3 options

10 mm	10 mm	Valve
XM-0404	XM-0305	XE-0015
+	+	+
	MM-0014	MM-1501

Vents : 3 options

0,5 L	2 L	8 L
XE-0400	XE-0211	XE-0500
	+	
	MM-0014	

Resin flow profile

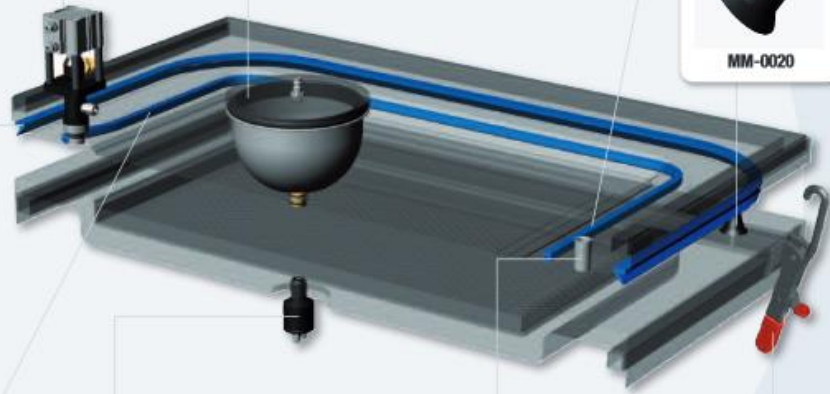
RD20-4530

Location cone

MM-0020

Vacuum seals

	Calibration seals
RD476-003	
RD20-5895	RD20-3391



Resin seals : 2 options

Calibration seals	
RD-001-002	RD20-3340
Silicone seals	
RD420-0092	RD421-001

Air ejector

20 mm
MM-2001
+
XE-0020

Vacuum connexion

20 mm	10 mm
QAC94F	
+	+
QAC93	XM-0404

Clamps

SA-0351
or
SA-0331

Ultrasonic leak detector, control of leaks location

The ultrasonic leak detector is particularly adapted to the control of the flexible airtightness during the vacuum processes like vacuum infusion, vacuum moulding and RTM or RTM LIGHT.
- Supply with a handbag



INFUSION ACCESSORIES

Connectors T



ACIT10PP
ACIT10PA
ACIT16PP
ACIT20PP

10 mm	Bag 50	T° max 90°C
10 mm	Bag 50	T° max 200°C
16 mm	Bag 50	T° max 90°C
20 mm	Bag 25	T° max 90°C

Connectors reduced T union



ACITR16-10PP
ACITR20-16PP
ACITR20-10PP

16-10 mm	Bag 50	T° max 90°C
20-16 mm	Bag 50	T° max 90°C
20-10 mm	Bag 50	T° max 90°C

Connectors L



ACIL10PP
ACIL16PP
ACIL20PP

10 mm	Bag 100	T° max 90°C
16 mm	Bag 50	T° max 90°C
20 mm	Bag 50	T° max 90°C

Connectors I connection



ACII10PP
ACII16PP
ACII20PP

10 mm	Bag 100	T° max 90°C
16 mm	Bag 100	T° max 90°C
20 mm	Bag 50	T° max 90°C

Connectors reduced I



ACIIR16-10PP
ACIIR20-16PP

16-10 mm	Bag 100	T° max 90°C
20-16 mm	Bag 50	T° max 90°C



Correspondence with the connectors and the inside pipes diameters d (mm) :

ACI10	→	pipe d10
ACI16	→	pipe d15
ACI20	→	pipe d19
ACI25	→	pipe d23

OTHER REINFORCEMENTS

GLASSFIBRE

Glassfibre Chopped Strand Mats:

- Emulsion Bounded, Available in 92 and 127cm width
- Powder Bounded, Available in 92 and 127cm width.



Chopped Strand Mats with densities from 300, 450 and 600gr. Fibre diameter is about 12µm. Roll widths 92 or 127cm

Spray Gun Roving

Spray Gun Roving ERS240T132 - 2400 TEX, DNV APPROVALS

Filament Winding Roving

Filament Winding Roving EDR 240T 910 - 2400 TEX

Pultrusion Roving

Pultrusion Roving EDR 480-T911 4800 TEX

Single End E-Glass EDR 960-T911 9600 TEX



SURFACE MATS

Acrylic Surface Mats

ACR-65 Non-woven fabric, 65 g/m². Improves the aspect of the laminate when applied on direct contact with the mould or after a gelcoat. Has a high porosity and elongation, which improves the good air and resin flow. Roll length: 200 lm – width 150cm

Glassfibre Surface Mats

M524 ECR 30S 30 gr/m².

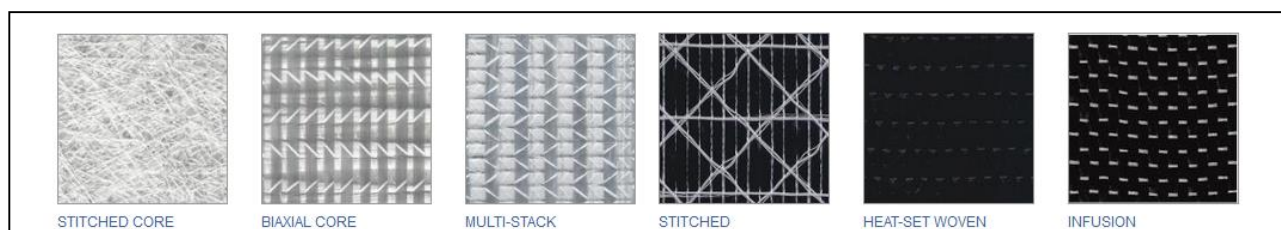
The glass veil is composed of dry-laid randomly dispersed glassfibre strands bonded with resin. The material is designed to provide a gel-coat reinforcement and a smooth resin-rich surface to the composite.




FORMAX is a leading global manufacturer of Carbon and E-Glass, Multiaxial (Non Crimp) fabrics, for use predominantly in manufacturing components for the aerospace, automotive, marine and industrial markets.

FORMAX produces a comprehensive range of Carbon and Glass multiaxial fabrics, including Unidirectionals, +/-45 Biaxials, 0/90 Biaxials, Triaxials, and Quadaxials.

FORMAX full range of carbon multiaxials also are awarded DNV approval.



LYCELL / MYCELL

Mycell is a premium product with rigid, closed cell foam with a high stiffness and strength to weight ratio. The initial mechanicals properties remain unchanged after exposure up to 90 °C. It offers also additional thermal insulation. Mycell has Germanischer Lloyd Statement of Approval. 



Marine:

Hulls
Decks
Partitions
Furniture
Submarine

Transports:

Trains
Aircraft
Autobus
Refrigerated trucks



LYcell is rigid recycled structural PVC core foam with high mechanical characteristics, Available in different density for an efficient use as core in sandwich technologies. It complies with most resins used in composite production.

		LYcell structural core foam					
		LYcell 040	LYcell 060	LYcell 080	LYcell 100	LYcell 130	
Density	ISO 845	kg/m ³	40	60	80	100	130
Compressive strength	ISO 844	MPa	0,45	0,84	1,00	1,30	2,50
Compressive modulus	DIN 53421	MPa	20	40	70	100	150
Tensile strength	ISO 527-2	MPa	0,70	1,10	1,70	2,00	3,00
Tensile modulus	ISO 527-2	MPa	14	34	50	70	90
Shear strength	ISO 1922	MPa	0,50	0,70	0,90	1,30	1,80
Shear modulus	ASTM C393	MPa	13	16	24	38	54
Shear elongation at break	ISO 1922	%	8	14	20	24	27
Water absorption	DIN EN 12087 + 96h ISO 2896	%	1	1	1	1	1
Thermal conductivity		W/mK	0,031	0,035	0,037	0,037	0,037
Thermal expansion		MK ⁻¹	40	35	35	35	35
Permeability		mg/m ² hPa	0,95	0,51	0,30	0,17	0,10
Fire resistance	RF2/75/A	class*	I				
Fire resistance	RF3/77	class*	II				
Temperature**		°C	-200 / +80 (100)				
Colour			azure	yellow	green/ hazel brown	red	blue

Applications

Marine:

- hulls
- decks
- partitions
- furniture
- submarine devices

Transports:

- trains
- aircrafts
- autobus
- refrigerated trucks

Buildings:

- partitions
- special beams
- windows
- rolling shutter
- doors

Wind mill:

- blades
- nacelles

Sport:

- ski
- snowboards
- wakeboards
- surf
- hockey sticks

Filler

CAB-O-SIL® M-5

CAB-O-SIL®M-5 untreated fumed silica is a synthetic, amorphous, colloidal silicon dioxide that is generally regarded as unique in industry because of its unusual article characteristics.



BODOTEX EPOXY

Bodotex Composites Specialists in vacuum infusion epoxy resins

Resin: Bodapox 1200

Epoxy with low viscosity for vacuum infusion. Good wetting also of carbon fibers. Good mechanical strength.

Bodopox 5000H (Brush)

Epoxy resin for hand lay-up of glas- and carbon fiber. Good wetting properties and good thixotropy. Normally used together with curing agent Bodocure CA43 series or Bodocure INF32 series.

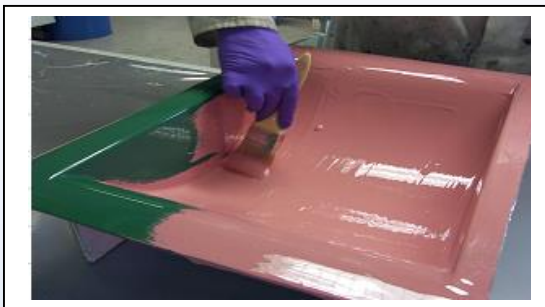
Catalyst Bodocure INF32,

Curing agent for vacuum infusion or hand lay-up. Preferably to be post cured at +35degr.C or higher

WWW.BODOTEX.DE

Mould Protection

Crystic Mouldguard It's a flexible pre-accelerated thixotropic coating material specifically developed for the protection of composites moulds when put into storage or for transportation. Crystic Mouldguard remains permanently flexible when cured.



Crystic Mouldguard is available in brush or spray quality, easy to apply, easy to remove stains.

Long Term Storage

Moulds can be covered with Crystic Mouldguard and left outside for long periods of time. The mould shown had been left outside for 6 months before Crystic Mouldguard was removed very easily revealing a mould surface in excellent condition



AkzoNobel

Peroxides

Butanox®

Butanox® is the world's leading brand of methyl ethyl ketone peroxides (MEKP). These products are used for the curing of thermoset resins and coatings.

Butanox M50 Standard general purpose catalyst. Suitable for gelcoats /marine applications

Butanox LPT Longer geltime and suitable for large mouldings. Very suitable for Filament Winding

Trigonox

Trigonox 44B Acetylacetone peroxide, in solvent mixture. Comparable geltime with M50 but faster cure. Suitable for general moulding RTM

Trigonox 239 Cumyl hydroperoxide, 45% solution in solvents. For use with Crestapol 1250 and Vinylester. Other qualities available with longer delivery times.

Perkadox

CH- 50X Dibenzoyl peroxide, powder, 50% with dicyclohexyl phthalate. Suitable for RTM and Pultution process.



Scott Bader brands

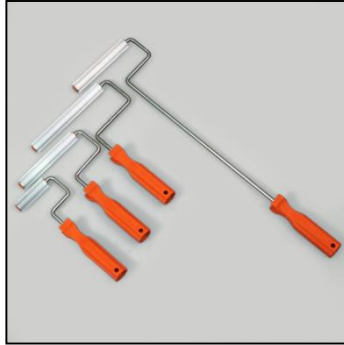


OTHER PRODUCTS

All rolls are made in strong cast steel (nickel-plated), with ergonomic plastic grip control.
All of the rolls can be provided with telescopic extensions.



Corner Roller:
11/40-300, 11/40-530



Paddle Roller horizontal tracks:
70/21, 140/21, 180/21,
140/21-600



Roller vertical tracks:
35/12s, 70/12s, 140/22s
70/30s



Paddle Roller horizontal tracks:
70/45, 140/45, 180/45, 24/45



Dosimeter 1 litre round bottle



Kleen All Paste Hand Cleanse for
fast removal of all paints, un-
Solved resins, adhesive,
grease etc.



Farécla is used in plug and mould construction and maintenance as well as on finished parts to remove defects and improve surface gloss. Typical markets include marine, land transport sanitary ware, wind energy and aerospace. **Farécla Profile** can also be used to achieve very high gloss finishes on painted or lacquered wood surfaces and to remove scratches from acrylic glass.



For more information about Farécla contact Scott Bader Scandinavia or visit <http://www.farecla.com>