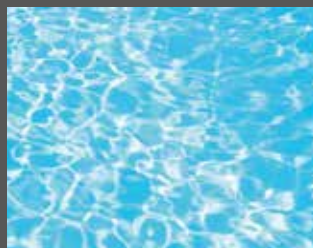




Swimming pool guide

High performance systems for
composite swimming pools



” HEAR WHAT OUR CUSTOMERS SAY

Scott Bader is the partner of choice in the manufacturing of our swimming pools at LPW Corporate. With high performance gelcoats and resins such as Crystic® G 976 SMK and Crystic® 397PA, we get excellent performance for debulking and superb resistance to hydrolysis and chemical/UV degradation. These products also fit well with our automated process.

Baudouin de Troostembergh
General Manager, LPW Corporate

OVERVIEW

HIGH PERFORMANCE CRYSTIC® GELCOATS FOR SWIMMING POOLS

Scott Bader has long invested in market leading research and development from laboratory to application, combining superior pigment technology with our industry leading Crystic® performance systems for unrivalled performance.



TECHNICAL PERFORMANCE BENEFITS

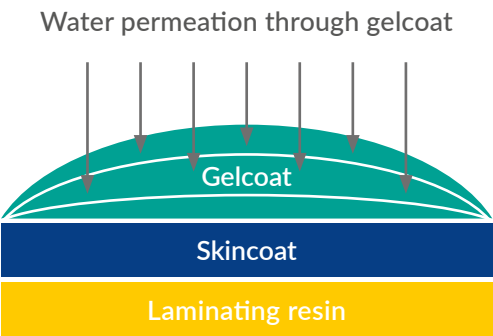
- Exceptional aesthetic finish and protection
- High quality coating
- Long-term performance
- Chemical resistance
- High performance reinforced laminate

CONTENTS

Common issues with composite swimming pools	4
Product range	5
Typical swimming pool construction	6
Chemical resistance performance - chlorinated water 5% concentration	7

COMMON ISSUES WITH COMPOSITE SWIMMING POOLS

OSMOSIS



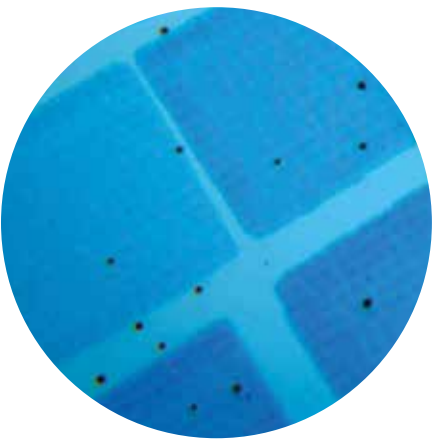
Potential causes

- Protection of the laminate is weak due to the gelcoat being too thin
- Under cured as a result of the level of peroxide and/or an unsuitable working temperature
- Poor application with microporosity in the gelcoat and/or bubbles in the skin coat
- Non-specialised products which can result in poor chemical resistance and/or the use of emulsion CSM behind the gelcoat

Crystic® solutions and benefits

- Using our Crystic® pool grade gelcoats with VE679PA skin coat ensures an optimised barrier to osmosis
- Excellent osmosis resistance when tested at 40°C for 12 months
- Zero porosity achievable with 700-800µ cured film thickness
- Fast curing properties using Crystic® VE679PA

BLACK SPOTS

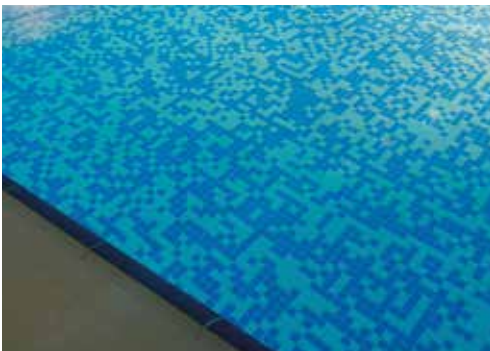
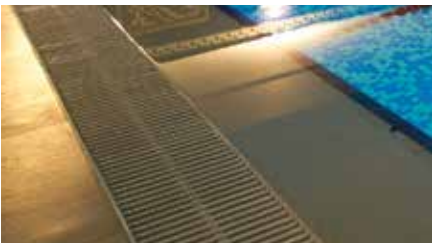


Cause of problems

- Black algae development
- Copper salt deposit
- Gelcoat cobalt oxidation

Crystic® solutions and benefits

- Low cobalt content
- High level of pigment dispersion
- No microporosity
- High water resistance



PRODUCT RANGE

PRODUCT	DESCRIPTION	GELTIME (mins)	TENSILE STRENGTH (MPa)	TENSILE MODULUS (GPa)	HDT (°C)	WATER ABSORPTION (mg)	AVAILABILITY*
Gelcoat NPG/ISO ensures aesthetics and protection							
G 976 SMK	Spray ISO/NPG gelcoat with high chemical resistance and low colour fading	9	70	3.4	90	14	Europe
G 997 SMK	Water clear spray ISO/NPG gelcoat used with glitters or chips for special effects	11	70	3.4	90	14	Europe
Skincoat ensures chemical resistance							
VE 679PA	Modified vinyl ester resin with good chemical resistance and rapid curing	23	52	3.0	94	15	UK, Europe, Middle East, Africa, Oceania, India, South East Asia
VE 682PA	Isophthalic modified vinyl ester resin for skin coat applications	17	74	3.6	82	16	Europe
397PA	ISO/NPG polyester resin with high HDT	8	65	3.5	117	19	UK, Europe, Africa
Laminating resin ensures the mechanical performance of the swimming pool							
2-446PA	Pre-accelerated, thixotropic, spray viscosity polyester resin with low styrene emission	25	50	3.8	67	15	UK, Europe, Middle East, Africa, Oceania, India, South East Asia
491PA	Thixotropic, isophthalic polyester resin with good water and chemical resistance	12	77	3.5	77	17	UK, Europe, Middle East, Africa, Oceania, India, South East Asia
489PA	Thixotropic, isophthalic polyester resin	12	76	3.5	77	17	UK, Europe, Africa, South America
Topcoat ensures the protection of the back of the laminate							
65PAX	Brush ISO topcoat with good resistance to water ingress	9	75	3.5	75	18	UK, Europe, Middle East, Africa, Oceania, India, South East Asia

*Availability - minimum and maximum batch/consignment sizes may apply. Subject to revision due to specific country regulatory changes. Products may not be available in all countries within stated region, check with local SB representative.

TYPICAL SWIMMING POOL CONSTRUCTION

Following extensive research and development on the use of pigments in swimming pools, Scott Bader now offers highly chemical resistant pigments to avoid colour fading, which is a major issue experienced in swimming pools.

Optimum construction

1. Gelcoat
2. Skincoat
2. Laminating resin
4. Topcoat

RECOMMENDED COLOURS

Our testing confirms light colours are recommended for the manufacture and relining of GRP swimming pools. Dark colours are not recommended.

The vast range of gelcoat and topcoat colours that are available have varying effects on surface temperatures under sunlight. White and light colours reflect the most sunlight whilst black and dark colours absorb it. Hence darker colours develop a higher temperature compared to lighter colours. As the temperature of the swimming pool water warms so does the gelcoat or topcoat.

Our topcoats contain wax which ensures they cure tack free. At high temperatures, dark colours are at risk of improper cure due to the wax remaining in the solution of the topcoat rather than forming a tack free barrier between the topcoat and the air.

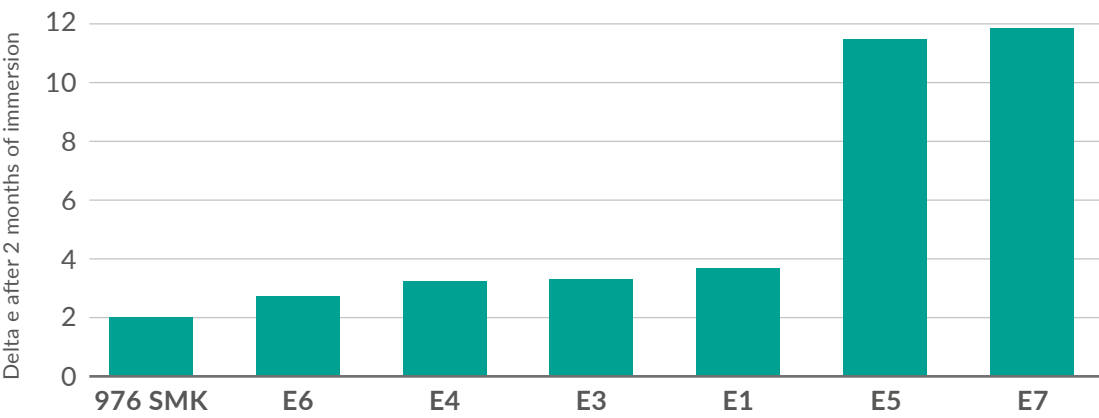
If you're unsure of the colour to choose, please contact your local Scott Bader representative for expert advice.



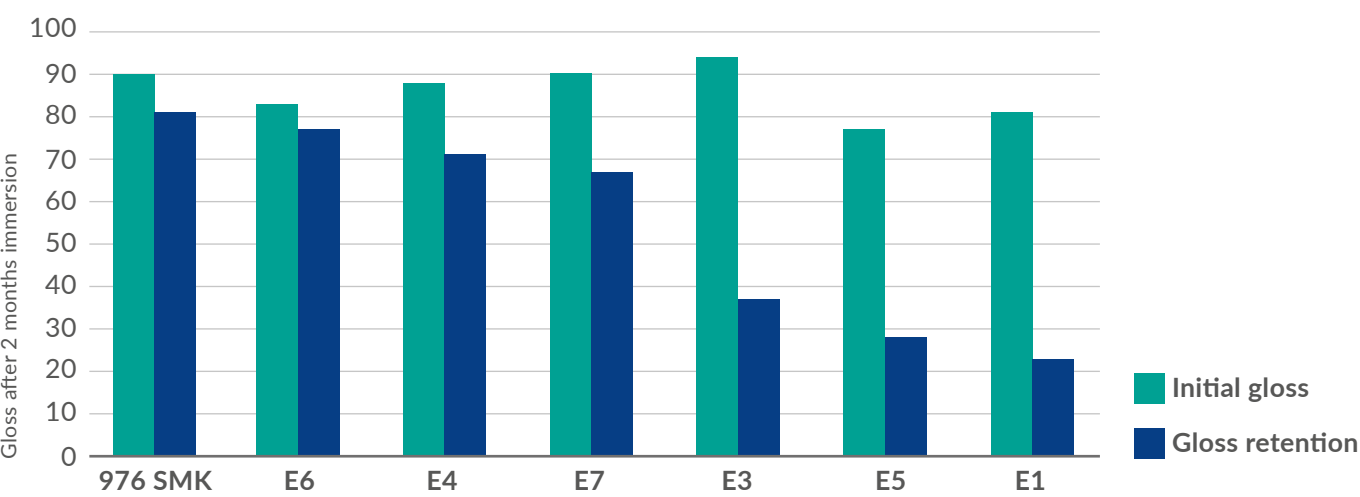
CHEMICAL RESISTANCE PERFORMANCE - CHLORINATED WATER AT 5% CONCENTRATION

The charts below show superior performance from Scott Bader's Crystic® system for both gloss retention and colour shift vs. several competitive products.

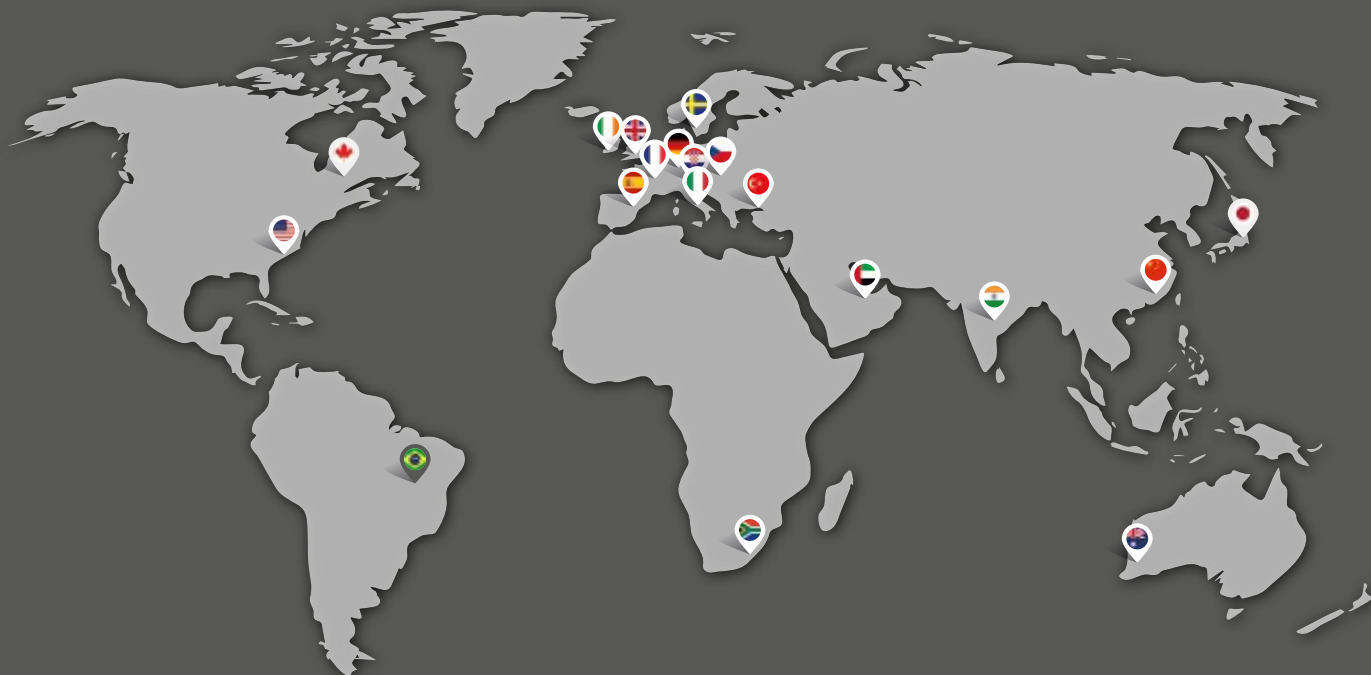
Hypochlorite resistance (5% concentration - 2 months)



Hypochlorite resistance (5% concentration - 2 months)



SCOTT BADER GROUP COMPANIES



Head Office
Scott Bader Company Limited
Wollaston, England
Tel: +44 (0) 1933 663100
Email: enquiries@scottbader.com

Scott Bader France
Amiens, France
Tel: +33 3 22 66 27 66
Email: enquiries@scottbader.com

Scott Bader Spain
Barcelona, Spain
Tel: +34 93 583 17 68
Email: enquiries@scottbader.com

Scott Bader Germany
Weiden, Germany
Tel: +49 961 401 84474
Email: enquiries@scottbader.com

Scott Bader Ireland
Dublin, Ireland
Tel: +353 1801 5656
Email: enquiries@scottbader.com

Scott Bader Scandinavia
Falkenberg, Sweden
Tel: +46 346 10100
Email: enquiries@scottbader.com

Scott Bader Eastern Europe s.r.o.
Praha 6, Czech Republic
Tel: +420 (0) 485 111 253
Email: enquiries@scottbader.com

Scott Bader Croatia
Zagreb, Croatia
Tel: +385 1 240 6440
Email: enquiries@scottbader.com

Scott Bader North America
Mocksville, NC, USA
Email: info@scottbader-na.com

Scott Bader ATC
Drummondville, Canada
Tel: +1 (819) 477 1752
Email: enquiries@scottbader.com

Scott Bader South Africa
Hammarisdale, South Africa
Tel: +27 31 736 8500
Email: enquiries@scottbader.com

Scott Bader Middle East
Dubai, United Arab Emirates
Tel: +971 481 50 222
Email: enquiries@scottbader.com

Scott Bader Asia Pacific
Shanghai, China
Tel: +86 (21) 5298 7778
Email: enquiries@scottbader.com

Scott Bader Japan KK
Yokohama, Japan
Tel: +81 (0) 45 620 3745
Email: Otoiawase@scottbader.com

Scott Bader Australia
Perth, Australia
Tel: +61 (08) 9418 4555
Email: enquiries@scottbader.com

Scott Bader India
Scott Bader Pvt. Ltd, Mumbai, India
Tel: +91 22 4220 1555
Email: enquiries@scottbader.com

NovaScott Especialidades Químicas Ltda
Civit II, Serra, ES 29165-973, Brazil
Tel: +55 27 3298 1100
Email: enquiries@scottbader.com

Scott Bader Italy
Emilia Romagna, Italy
Tel: +39 3454534391
Email: enquiries@scottbader.com

Scott Bader Turkey
Istanbul, Turkey
Email: enquiries@scottbader.com



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