

Technical Information

NCS POOLCOAT 73 P3038 PA E

NDS180/REV06

HIGH PERFORMANCE SURFACE COAT FOR SWIMMING POOL APPLICATIONS SUMMER/EXPORT VERSION

DESCRIPTION

NCS POOLCOAT 73 P3038 PA E is a Pool Blue pre-accelerated, thixotropic unsaturated polyester surface coat based on Isothalic Acid and Neopentyl Glycol designed for use as a protective, decorative layer directly onto the glass reinforced laminate layers in the relining and repair of swimming pools.

FEATURES	BENEFITS
Thixotropic	Minimal drainage with excellent levelling properties
Pre-accelerated	Requires only the addition of suitable catalyst
Fast-curing	Tack-free finish in less than one hour
Good gloss	Attractive smooth protective surface
UV-stabilised	Improved weather resistance
Low water absorption	Excellent water resistance
Pre-pigmented	High opacity Pool Blue shade

OTHER VERSIONS

NCS POOLCOAT 73 P1075 PA E	Iso/NPG Durable White Poolcoat
NCS POOLCOAT 73 NAT PA E	Iso/NPG Clear Poolcoat

TYPICAL LIQUID PROPERTIES

PROPERTY	SPECIFICATION	NCS TEST METHOD
Viscosity @ 25°C, mPa.s	25 000 - 40 000	5.3
Geltime @ 25°C, 2 phs* BUTANOX M50, minutes	10 – 18	8
Tack-free time @ 35°C, 2 phs* BUTANOX M50, minutes	60 maximum	25B
Stability in the dark @ 25°C, months	6 minimum	4.1
*phs - parts per hundred surface coat		

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CURING CHARACTERISTICS

NCS POOLCOAT 73 P3038 PA E is pre-accelerated and requires the addition of one to two parts of MEKP type catalyst per hundred surface coat immediately prior to application to start the curing reaction.

It should be noted that the addition of monomers, fillers and/or pigments may affect the geltime, cure characteristics and tack-free time of this product.

NCS POOLCOAT 73 P3038 PA E is thermosetting and therefore should not be processed at temperatures below 15°C. The Poolcoat should also not be applied if the air temperature in direct sunlight is above 32°C and the pool surface temperature is greater than 45°C.

It is essential to thoroughly mix the catalyst into the surface coat.

The minimum recommended catalyst addition is one part per hundred surface coat.

The ambient temperature and the amount of catalyst control the geltime of the gelcoat. In colder temperatures, Butanox M60 is recommended and in warmer temperatures, Butanox LPT. The levels of catalyst can be approximately determined from the table below which shows the geltime of 100 parts by mass of NCS ULTRAGEL 73 P3038 PAE, containing 1 to 3 phr catalyst.

GELTIME

Parts of M60 to 100 parts UG 73 P3038 PAE	1	1.5	2	2.5	3
Geltime @ 15°C, minutes	130	82	35	29	23
Geltime @ 20°C, minutes	62	44	24.5	20	15
Geltime @ 25°C, minutes	29.5	22	14	11	7

Parts of M50 to 100 parts UG 73 P3038 PAE	1	1.5	2	2.5	3
Geltime @ 20°C, minutes	69	48	28	23	18
Geltime @ 25°C, minutes	34	24	15	12.5	10.5
Geltime @ 30°C, minutes	21	12.5	9	7	5.5
Geltime @ 35°C, minutes	15.5	12.5	9	7	5.5

Parts of LPT to 100 parts UG 73 P3038 PAE	1	1.5	2	2.5	3
Geltime @ 30°C, minutes	60	40	28	23	19
Geltime @ 35°C, minutes	40	29	19	17	15
Geltime @ 40°C, minutes	23	17	11	10	9

APPLICATION

NCS POOLCOAT 73 P3038 PA E is formulated to be applied by brush application. The thixotropy has been optimised so that it does not drain when applied to a vertical surface.

Any alteration of the product could result in the poolcoat not performing satisfactorily.

During and immediately after application of NCS POOLCOAT 73 P3038 PA E, the work area must be free of moisture and contamination.

It is recommended that a swimming pool coated with NCS POOLCOAT 73 P3038 PA E should be allowed to stand empty for 5 to 6 days in hot weather and 7 to 10 days in cool weather.

NCS POOLCOAT 73 P3038 PA E must not be considered as a paint, nor must it be applied independently without the prior use of suitable glass reinforcements.

Effect of Temperature

NCS Poolcoat should not be applied onto a surface whose temperature is above 45°C. This is equivalent to an air temperature of 32°C in direct sunlight. The surface will remain slightly tacky and will go white when the pool is filled with water.

For further details refer to NCS Resins 'Suggestions for Lining Swimming Pools with Glass Reinforced Polyester Resins' reference APP030/0.

PIGMENTS & FILLERS

The addition of fillers, solvents or thixotropic additives may downgrade the product and is not generally recommended. The same consideration applies to pigments. NCS POOLCOAT 73 P3038 PA E is already pigmented to a Pool Blue shade and should not be pigmented further. It should be noted that NCS POOLCOAT 73 NAT PA E (clear version) should not be pigmented to a very dark shade for use as a pool coating, as light patches may appear contrasted against the dark colour of the poolcoat. A phenomenon which commonly occurs when the poolcoat is undercured or when the pool is filled too soon with water. This phenomenon also commonly occurs when the poolcoat is applied in hot weather and in direct sunlight when the surface temperature is above 45°C. (Equivalent to an air temperature of 32°C in direct sunlight) The Poolcoat will remain permanently undercured and may turn white when the pool is filled with water. Since darker colours absorb more heat from the sun than lighter shades the surface temperature of the darker colours will be considerably higher than the lighter shades.

It is recommended that, where mouldings are produced as sub-components of larger structures, or are simply large structures, that the same batch of Poolcoat is used to enable the entire job to be completed, thus ensuring an exact colour match. Thorough stirring of the mix shortly before use is recommended to ensure that the pigment is fully dispersed and that no separation has occurred. Care must be taken not to introduce air into the system. Users are reminded that the final colour of the cured gelcoat and laminate can be affected by the curing system.

STORAGE AND HANDLING

To ensure maximum stability and maintain optimum properties, surface coat should be stored in closed containers, maintained below 25°C and away from heat sources and sunlight. All storage should conform to local fire and building codes. Drum stock should be kept to a reasonable minimum with first-in, first-out stock rotation.

Where bung-in-head containers are stored outside, it is recommended that these be stored in a horizontal position to avoid the ingress of water.

STANDARD PACKAGE

Non-returnable metal drums.

MATERIAL SAFETY DATA SHEET

A Material Safety Data Sheet is available from your NCS Resins' representative. Make certain that you obtain a copy of this guide to the safe handling of unsaturated polyester resins and resin systems.

PLEASE READ AND UNDERSTAND THE MATERIAL SAFETY DATA SHEET BEFORE WORKING WITH THIS PRODUCT
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WARNING: CARE MUST BE TAKEN TO AVOID DIRECT MIXING OF ANY ORGANIC PEROXIDE (CATALYST) WITH METAL SOAPS, AMINE OR ANY OTHER POLYMERISATION ACCELERATOR OR PROMOTER, AS VIOLENT DECOMPOSITION WILL RESULT!

NCS RESINS BRANCHES AT:

JOHANNESBURG / DURBAN / CAPE TOWN / PORT ELIZABETH