

# Technical Data Sheet

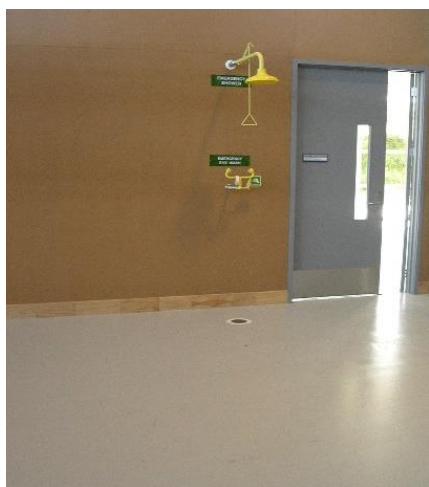
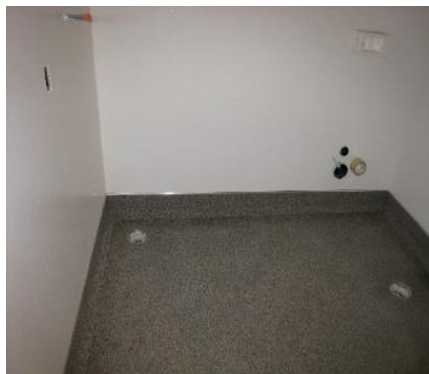
## Aquacolour Water-based Epoxy Coating System



### DESCRIPTION:

Aquacolour is a water-based two-part epoxy-acrylic gloss coating system. Aquacolour gives a smooth glossy finish with excellent wear resistance. It is a general-purpose epoxy coating designed for commercial and industrial applications both on walls and floors. Aquacolour may also be used in many other situations where protective coatings are a requirement.

### TYPICAL FEATURES | BENEFITS:



- Excellent ease of use – water-based.
- Non-flammable.
- No odour for use in confined spaces.
- Non-toxic when cured.
- Long pot life
- Heat resistance – up to 70°C
- Excellent flow and levelling properties.
- Excellent adhesion to most substrates; damp and dry.
- Very good abrasion and scuff resistance.
- Attractive Surface Finish – Semi-gloss.
- May be used on walls and floors.
- Will bond to **green / fresh** concrete when used in conjunction with Aquakem  
*\*\*See cautions below\*\**
- Easily cleaned.
- Abrasion, chemical, stain, graffiti resistant surface for wall and floor coatings.
- Will withstand cleaning with aggressive solvents to remove graffiti, etc.
- Will form a waterproof membrane. *(when used in conjunction with Aquakem)*
- Fibreglass Laminate lining system. *(Refer: separate Situcalad WCS technical literature)*
- Excellent resistance to a wide variety of chemicals and petroleum products  
*– refer to chemical resistance chart.*
- Suitable for frequent washing with hot water and detergents.

### COLOURS:

Aquacolour is available in White.

May be tinted to a range of pastel colours in the standard BS5252F, AS2700 and RAL colours *(refer: allnex Construction Products).*

The colours shown are a guide only.



### AQUACOLOUR SURFACE FINISH DESIGN OPTIONS:

Aquacolour can be applied as a [smooth surface](#) or [profiled non-slip \(for floors\)](#) application. The degree of the surface profile is determined by the non-slip requirement for the environment. For specific advice. [Refer: allnex Construction Products.](#)

### PERFORMANCE DATA:

Properties	Values		
Minimum Application Temperature: Air	+10°C		
Maximum Application Relative Humidity: Air	85% <i>Requires good ventilation and cross air movement to aid drying</i>		
In-service temperatures - wet : on fully cured system	-20 to +70°C		
Heat resistant:	+70°C		
Pencil Hardness	6H		
Flexibility - 6mm mandrill	Pass		
Chemical Resistance	Resistant to chemical spillage –cured 7 days at 25°C. <i>Refer: Chemical resistance literature.</i>		
Slip resistance:	R11 to R13. <i>Refer: Slip resistance chart</i>		
Hard Dry:	+20°C ~ 75%RH	12 hours	
Recoat Time:	~ Minimum ~ Maximum	+20°C ~ 75%RH	12 hour 24 hours
Full Cure:	+20°C ~ 70%RH	7 days	
Unaffected by water:	+20°C ~ 70%RH	>48 hours	

### RECOMMENDED USES:

- Ablution areas.
- Construction and Mining Industry.
- Food processing facilities.
- Refineries.
- High Performance finish coating for industrial protection on outside of chemical transport and storage tanks.
- Slip resistant floor finishes.
- Bulk retail.
- Chemical and Oil Industry.
- Pulp and Paper mills.
- Residential garages and workshops.
- Sewerage treatment plants.
- Silos.
- Warehouses.

### LIMITATIONS:

- Application below +10°C.
- Application to green (uncured) concrete. - [see note below.](#)
- Contact with water within 48 hours after application.
- Continuous immersion in strong acids, alkalis or aggressive solvents.
- Application in very cold, damp, unventilated conditions. (Use Terratuff in these conditions)
- Weathering | UV
  - Some chalking will occur in time but will maintain good film integrity.
  - Some yellowing will occur.
- Application to unsound substrates.
- Application to incorrectly prepared surfaces.

## CHEMICAL RESISTANCE:

The following chart shows a representation of the chemical resistance of some of the colours available.

Resistant to chemical spillage –cured 7 days at 25°C.

Results ~ Taken after 3 weeks exposure

### Note

Variables which may under extreme conditions, influence the chemical or corrosion resistance are:

- Temperature of chemical concentration.
- Intermittent or continuous contact.
- Application in adverse conditions.
- Risks of evaporation from spillage causing concentration to rise adversely.

Test Procedure	Observation	Results
Spot Testing.	Checked for chemical attack and hardness throughout the testing period.	Taken at the time specified.

Test Media	Concentration	Aquacolour	Test Media	Concentration	Aquacolour
<b>ACIDS</b>			<b>ALKALIS</b>		
Hydrochloric Acid	10%	G	Caustic Soda	10%	G
Sulphuric Acid	10%	G			
Acetic Acid	10%	G	<b>SOLVENTS</b>		
Hydrogen Sulphide	All	E	MEK		F
			Xylene		G
<b>PETROCHEMICALS</b>			<b>DISINFECTANTS &amp; CLEANERS</b>		
Kerosene			Detergent (DET 18)	100%	G
			Bleach (2.5% Sod Hyd Cl)		G
			MEKP – M50		G
<b>OTHERS</b>			<b>SALT SOLUTION</b>		
Water Resistance 25°C		E	Salt Spray ASTM B117-57T 1000 hours		G
Water Resistance 100°C		G			

### LEGEND:

<b>U</b>	Unaffected (i.e. after 3-week exposure the samples have not changed)	<b>M</b>	Marked (Short term exposure, the test media will leave a mark on the sample)
<b>A</b>	Attacked (Short- or long-term exposure, the mechanical properties will deteriorate)	<b>D</b>	Destroy (Short- or long-term exposure, damage will occur)
<b>E</b>	Excellent	<b>G</b>	Good
<b>EF</b>	Evaluate Further	<b>F</b>	Fair

### NON-SLIP:- floor definitions:

The contractor shall ensure that the surface finish in all zones is agreed with the client.

*(Samples to be supplied and agreed prior to start of the contract)*

Aquacolour Type	Description	Description	CF Rating	SRV Rating	R Rating	Non - Slip
	Installation Type	Finish Type	NZ/AS 3661.1 1993	AS/NZS 4586		Application Rates
Type A	Smooth: Roller applied -	Smooth	0.46	41	R11	
Non-Slip Class 1	Fine/Medium duty non-slip: Roller applied with the addition of:- ~ Microcells <i>Mixed into the Aquacolour prior to application. Applied in the second to last coat.</i>	Fine non-slip	0.54	50	R11	@100grams/4 Ltr
	~ Revtrd <i>broadcast into the second to last coat</i>	Fine-Medium non-slip	0.56	51	R12	12 grams / m <sup>2</sup>
Non-Slip Class 2	Medium duty aggregate: non-slip: Roller applied with the addition of:- ~ J61 Sand ~ Q900 <i>Broadcast into the wet Aquacolour coating with further coats over the aggregate Broadcast</i>	Fine – Silica Sand Fine – medium garnet	0.63 0.73	57 64	R12 R13	1.0 kg / m <sup>2</sup>

## SUBSTRATE: – Preparation

All substrates shall be stable and solid.

### Note

All control joints junction cracks in the substrate etc. are to be properly treated.

## CONCRETE:

Shall have a surface which has been mechanically trowelled to AS3610:1995 U3/NZ/3114:1987U3 finish.

A minimum compressive strength of 25MPa at 28 days cure.

*This system may be applied to damp concrete and concrete that is greater than 7 days old, when used in conjunction with Aquakem. (Refer: Aquaduo Technical Literature)*

However; it is preferable to allow as long as possible for the concrete to cure and dry.

E.g. allow 28 days cure time after the placement of the concrete.

## Concrete Block:

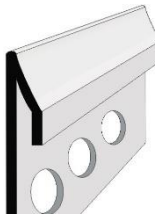
Concrete Block must be installed to the manufactures specifications and comply with current building codes.

## PLYWOOD | TIMBER | FIBRECEMENT

Refer: Aquacolour Specification

## COVE TOPS:

Install allnex cove upper termination metal strips: **5.2mm or 9.2mm rebated strip.** (Refer: Typical Resin Flooring Details Document)



Cove Strip 5.2mm



Cove Strip Rebated 9.2mm

If the coving strip cannot be used refer to the Resin Flooring Details Document for options.

## RESIN FLOORING DETAILS

Refer: Typical Resin Flooring Details Document

## FALLS TO WASTES:

STZ prefill system (for adding falls, slope modification and floor angles).

Types: Refer: STZ Prefill Technical Literature.

The falls must be specified pre-tender. (Aquacolour is thin film coatings system and prefill may involve significant extra materials).

The quantities of materials required to raise the floor height at wall perimeters is often underestimated.

To do this may involve significant extra costs and should be discussed and agreed.

It is a very common for STZ prefill system to be used under Aquacolour to create falls to drains and other filling applications.

Normally for new work falls are laid in the concrete and fall to drains.

However; in refurbishment situations the drains and falls are incorrect. Sometimes new drains are installed.

The Prefill can be installed to any thickness to create falls.

If the project is a food processing facility, ensure that your requirements fall within the guidelines of current legislation.

### Floor Fall Definitions

Floor Fall Definitions	
1:50	Liquids will free run to drainage
1:80	Liquids will migrate to drainage
1:100	Some ponding of liquids will occur, squeegee to drainage will be required.

## JOINTS:

All concrete control and construction joints should be carried through the Aquacolour.

### Jointing Options

Control   Construction Joints	Cold Joints   Non-Movement Joints
allnex K130 or allnex Sabre Seal SMP60	allnex K130 or allnex Sabre Seal SMP60

## QUALITY ASSURANCE:

The allnex approved Applicator shall ensure all QA checks have been undertaken prior to the installation process and subsequently during the installation process. The completed documentation must be made available to allnex and the client/clients authorised personnel. The product is to be installed within the required control range to ensure a fully cured hard wearing monolithic floor coating system.

Information to be recorded daily is:

- Concrete sub-base or prefill mix.
- Sequence of mixing, ratios and quantities and formula.
- Ambient temperature | Ambient relative humidity.
- Material batch numbers used.
- Substrate moisture content & Substrate temperature.
- Daily detail of licenced contractors on-site.

## CLEANING & MAINTENANCE:

### Cleaning:

*Refer: Cleaning Maintenance Document*

### Repairs:

Can be undertaken with further new Aquacolour applied directly following mechanical abrasion..

### Resurfacing:

allnex recommend **two** (2) options:

#### *Smooth System*

- Re-surfacing with further coats of Aquacolour.

#### *Profiled | Non-Slip System*

- A second option is Aquacolour Non-Slip which will reinstate the non-slip properties or add non-slip to a previously smooth surface finish.

## FIXING OF PLANT AND MACHINERY:

Mechanical fixings into the substrate must be resin fixed. This is to ensure that there is no water migration into the substrate. Conventional expanding plugs, screws or anchors are not an acceptable fixing method.

## HEALTH & SAFETY: Refer safety data sheets (SDS).

- Avoid skin contact.
- If spraying wear a suitable respirator.
- Wear safety equipment.

Date: Dec 2021

Replaces: Dec 2020

### Allnex Construction products, a Division of Allnex New Zealand Ltd

Auckland - 14 Industry Road, Penrose, - phone: 09-583-6544.

Hamilton - 18 Somerset Street, Frankton, - phone: 07-847-8658.

Wellington - Unit 9A, 4 Glover Street, Ngauranga Gorge, - phone: 04-240-0305.

Christchurch - 112 Carlyle Street, Sydenham, - phone: 03-366-6802.

Customer Service: 0508-882-288 [cs.constructionnz@allnex.com](mailto:cs.constructionnz@allnex.com)

[www.allnexconstruction.com](http://www.allnexconstruction.com)



**DISCLAIMER:** This information appearing in this Document (**Details**) concerning the product which is the subject of the Document (**Product**) is either based on present technical knowledge and tests done by allnex or tests done by, and data supplied from third parties including you, the customer. Since the actual use by you and by others of the Product is beyond the control of allnex, no warranty or representation, express or implied is made by allnex regarding the suitability for such use, nor does allnex accept any liability arising out of the use by you of other products or materials, whether third party or not, that may be referred to in this Document. allnex recommends that you carry out your own tests as to the suitability of the Product for your purpose, regarding which you accept full responsibility. In addition, if any of the Details appearing in the Document are based upon tests done by, and/or data supplied by any third party, allnex provides no warranties or representations in connection with those Details and you, the customer waives any right you may have against allnex in connection with the accuracy, completeness or otherwise of the Details. The information in this Document is not to be construed as absolutely complete or accurate since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or government regulations affecting use of the Product. allnex does not provide any warranty or representation to you that the Product does not infringe the intellectual property rights of any third party. All orders accepted shall be subject to the standard conditions of sale of allnex which are on the back of our invoice. In accepting the Product you, the customer acknowledge and agree: **a.)** The Product is or may be of a hazardous nature and that you, the customer, are responsible for the disposal of the container housing the Product in accordance with the requirements and regulations of the relevant supervising government. **b.)** The Product has a limited shelf life and must be stored strictly in accordance with the guidelines and specifications related to it. **c.)** Where the Details relate to Product tested by allnex, those Details are indicative only, regarding which there may be batch to batch variation. **d.)** allnex gives no warranty or representation as to the applicability for the particular use by you, the customer, of the Product and you the customer shall be responsible for ensuring that the Product is fit for your intended use. **e.)** allnex's liability for breach of any term, condition, guarantee or warranty (express or implied and concerning the information in this Document or the Product more generally) including any liability for direct or indirect consequential loss (including indirect loss of profits), is limited to the maximum extent permitted by law and, at allnex's election, to either replacing or repairing the goods or paying the cost of replacing or repairing the goods, or in the case of services, supplying the services again.