

DESCRIPTION:

A chemical resistant, vinyl-ester resin based, glass flake reinforced coating system (pre-filled).

Normally used as a highly durable overcoat for Situclad VE (Fibreglass Laminate) or Surechem VE (Resin Flooring) as a very high chemical resistant system.

It is a Performance Protective Finish:- it is not decorative | It is not flexible.

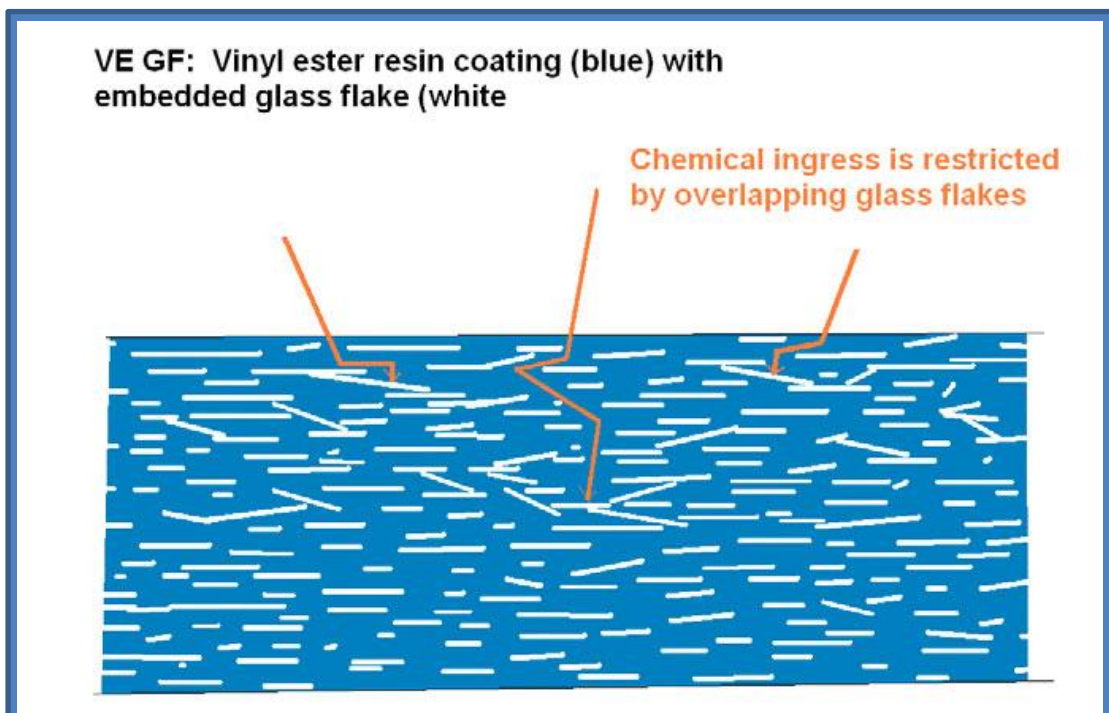
TYPICAL FEATURES | BENEFITS:

Situclad VE GF is a glass flake reinforced coating system applied in situ to provide a smooth, jointless, chemical & impact resistant, hygienic surface, which follows the substrate contours, profiles etc.

Situclad VE GF has been specifically designed to provide excellent all round chemical resistance at both ends of the ph.scale. I.e. Concentrated acids and alkali compounds.

The **fine internal glass flakes** self-reinforce the film and provide a tough, **chemical and heat resistant** coating. The flakes provide strong permeability resistance.

- Good stain and chemical resistance.
- Short application period.
- May be applied to a wide variety of surfaces. incl. Steel
- Excellent adhesion to properly prepared substrates.
- May be used in food safe areas.
- Easily repaired and maintained.
- Finish – Semi-gloss.
- Based on chemical resistant vinyl-ester resin.
- Very good abrasion and scuff resistance.
- Tolerant of application to a slightly damp surface.
- Resistant to peeling and flaking.
- Complies with Food environment regulations
- Easily cleaned.
- Cured Film is non-toxic.



PERFORMANCE DATA:

Element	Value	
Minimum Application Temperature: Air	+10°C	
Maximum Application Relative Humidity: Air	80%	
In-service Temperatures:	-20 to +100°C	
Laminate Hardness:	Barcol (934-1) 45	
Laminate Thickness:	1.0mm	
Tensile Strength:	85 MPa	
Flexural Strength:	140 MPa	
Flexural Modulus	3.4 Gpa	
Elongation at Break	6.7%	
Permeability:	Impermeable to water vapour	
Chemical Resistance:	Resistant to chemical spillage –cured 7 days at 25°C. Refer: Chemical resistance literature – see below	
Light Use:	+25°C ~50%RH	10 hours
Full Cure:	+25°C ~50%RH	36 hours Minimum

COLOURS:

Standard colour: White

Note

Tinting of this product is not recommended, as chemical resistance will be affected.

RECOMMENDED USES:

- Construction and Mining Industry.
- Feed Lanes – Animal Wintering Sheds
- Food storage and processing facilities.
- Pulp and Paper mills.
- Storage tanks / bunds. - walls and floors.
- Chemical bunds – [Only if used as part of the Situclad VE Fibreglass Protective Laminate System.](#)
[Refer: Situclad VE Technical Literature and Situclad VE Specification.](#)
- Chemical and Oil Industry.
- Concrete and steel protective finish.
- Pharmaceutical filling and processing areas.
- Sewerage treatment plants.
- Silos.

NOT RECOMMENDED:

- Application below +10°C.
- Application to green (uncured) concrete. Allow 28 days.
- Application within close proximity of foodstuff (odour may contaminate food products).
- Application to unsound substrates.
- Application to incorrectly prepared surface.

CHEMICAL RESISTANCE CHART@ +25°C Ambient

Test Procedure	Observation	Results
Aqueous Solution applied to the surface of test samples.	Checked for chemical attack and hardness throughout the testing period.	Taken after 3 weeks exposure.

Test Media	Concentration	Situclad VE GF	Test Media	Concentration	Situclad VE GF
ACIDS			ALKALIS		
Hydrochloric Acid	37%	NC*	Potassium Hydroxide	45%	NC*
Hydrofluoric Acid	20%	EF	Sodium Hydroxide (Caustic Soda)	50%	NC*
Sulphuric Acid	70%	NC	Sodium Hypochlorite		Refer allnex
Acetic Acid	70%	NC			
Hydrofluoric Acid	20%	EF			
Nitric Acid	30%	NC*			
Nitric Acid	40%	EF*			
Citric Acid	SAT SOLN	NC	OTHERS		
Lactic Acid	All	NC	Distilled Water	All	NC
Phosphoric Acid	85%	NC	Iodophors		NC*
Hydrogen Sulphide	All	NC			
Hydrogen Peroxide	35%	NC*	SALT SOLUTION		
Oxalic Acid Sat N	Oxalic Acid Sat	NC	Brine	SAT SOLN	NC

LEGEND:

NC	Non Corrosive	NR	Not Recommended
EF	Evaluate Further	*	Staining May Result

Solutions are Aqueous unless otherwise stated

The table represents a guide only. 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.
- Chemical resistance and general physical properties can be improved by post cure treatment.
- Good service may be expected where NR or EF is specified if exposure is intermittent or limited to occasional splash, spill or fumes.
 - Refer to [allnex Construction Products Ltd for specific advice on this, or chemical contamination other than those listed.](#)
- Chemical resistance and general physical properties can be improved by post cure treatment.
 - Refer to [allnex Construction Products Ltd for specific advice on this.](#)

Note

Chemical spillages should be cleaned up immediately.

SUBSTRATE:

All substrates shall be stable and solid.

Refer: [Situclad VE Glass Flake Specification Document for substrate types and requirements](#)

JOINTS:

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

Refer: [Situclad & Fibreclene Design Details](#)

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 Protective Lining System.

Information to be recorded daily is:

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

SURFACE PREPARATION:

Refer: [Situclad VE Glass Flake Specification](#)

WALL INTERNAL JUNCTIONS:

Refer: [Situclad VE Glass Flake Specification](#)

CLEANING & MAINTENANCE:**Cleaning:**

Conventional cleaning procedures are normally adequate to maintain clean and hygienic surface.

Refer: [Cleaning Maintenance Document](#)

Repairs:

- Chemically clean.
- Mechanically abrade surface.
- Solvent wipe with Styrene Monomer
- Apply Situclad VE Glass Flake as per "[Situclad VE Glass Flake Specification](#)".

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 \(SDS\)](#).

- Applicators are to comply with all current legislation when using this product.

Date: Sept 2021
Replaces: March 2021

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The logo for Allnex, featuring the word "allnex" in a bold, lowercase, sans-serif font. The letters "a", "l", and "l" are white, while "n", "e", and "x" are in a light blue color. A horizontal line with a gradient from purple to green passes behind the letters.

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