



New Guard Coatings Group

A global reputation to protect.

The information herewith is given with the best of New Guard Coatings Group knowledge.

Rights are reserved to change and update the data without notice.

This information is not exhaustive and it is the user's responsibility to ensure that this data sheet is the most current by contacting their local New Guard Coatings Group branch prior to using the coating/product.

www.newguardcoatings.com

NORTH • SOUTH EAST • MIDLANDS • NORTH WEST • HULL • SCOTLAND

SIGMASHIELD 4801

3 pages

May 2014
Revision of February 2014

Description Glassflake Vinylester Coating

PRINCIPAL CHARACTERISTICS

- High performance coating for new or old steel
- Suitable for wide pH range
- Excellent resistance to chemicals
- Excellent resistance to demineralised water
- Good resistance to a wide range of solvents.
- Suitable for high temperature immersion

COLOURS AND GLOSS White. – flat

BASIC DATA

Mass density 1.2 g/cm³

Volume solids 99%

(see information sheet 1726)

Recommended dry film thickness 500 - 3000 µm (Standard 500-1200µm)

Theoretical spreading rate 1.33 m²/l (65 ft²/gal) for 750 µm

2.00 m²/l (98 ft²/gal) for 500 µm

0.83 m²/l (41 ft²/gal) for 1200 µm

Full cure after 4 days at 20°C

Shelf life (cool and dry place) Base and catalyst (hardener) 6 months stored at temperatures below 20°C
Frequent temperature cycling will shortage storage life

RECOMMENDED SUBSTRATE CONDITIONS AND TEMPERATURES

- Minimum temperature for a satisfactory cure is 10°C\50°F.
- To prevent moisture condensation during application, surface temperature must be at least 3°C/5°F above dew point.
- Ensure good ventilation when applied in confined areas to assist evaporation and elimination of solvents.

INSTRUCTIONS FOR USE

Pot life mixing ratio by volume: resin to cure 98: 2

50 min. at 20°C

The pot life will vary substantially with temperature

AIRLESS SPRAY

- AIRLESS PUMP 45:1 or greater, fit leather seals and remove fluid filters, 10mm diameter (3/8") nylon lined hoses, large bore gun with 0.6mm to 1.5mm reverse clean tip.
- Typical tip size is 0.75 to 0.85mm with a 45° fan.
- The size of tip and fan pattern will vary with the nature of the work.
- Pressure to suit hose lengths and working conditions (circa 200 bar)

CLEANING SOLVENT

Cleaner: Thinner 50-02

SIGMASHIELD 4801

May 2014

ADDITIONAL DATA

Drying times

substrate temperature	20°C / 68°F
Dry to recoat minimum interval	5 hours
Dry to recoat maximum interval	48 hours

- Minimum Recoating: As soon as gel has occurred and whilst still tacky
- The Maximum overcoating times can vary substantially with climatic conditions and such has to be observed.
- Standard is 48 hours at 20°C, however strong UV /Sunlight will substantially reduce the overcoating time.
- Once maximum recoating time has been reached, adhesion values attained by an subsequent coat will reduce dramatically.
- Should this occur overcoating should be treated as repair, with the coating flash blasted to provide a physical key.
- Styrene cannot be used to reactivate the surface of this product and may impair adhesion.
- Take care to avoid contamination before application or subsequent coat.
- Ensure ventilation during cure.

The maximum recoating time will reduce significantly at high temperature or in string sunlight

Curing

Curing table

substrate temperature	full cure
20°C / 68°F	4 days

APPLICATION

- never add any solvent to SigmaShield 4801
- never add catalyst without continuous stirring
- never add more than the recommended amount of catalyst

Worldwide availability

It is always the aim of PPG Protective and Marine Coatings to supply the same product on a worldwide basis. However, slight modification of the product is sometimes necessary to comply with local or national rules/circumstances. Under these circumstances an alternative product data sheet is used

SAFETY PRECAUTIONS

- this is a solvent borne paint and care should be taken to avoid inhalation of spray mist or vapour as well as contact between the wet paint and exposed skin or eyes

SIGMASHIELD 4801

May 2014

WARRANTY

PPG warrants (i) its title to the product, (ii) that the quality of the product conforms to PPG's specifications for such product in effect at the time of manufacture and (iii) that the product shall be delivered free of the rightful claim of any third person for infringement of any U.S. patent covering the product. THESE ARE THE ONLY WARRANTIES THAT PPG MAKES AND ALL OTHER EXPRESS OR IMPLIED WARRANTIES, UNDER STATUTE OR ARISING OTHERWISE IN LAW, FROM A COURSE OF DEALING OR USAGE OF TRADE, INCLUDING WITHOUT LIMITATION, ANY OTHER WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE OR USE, ARE DISCLAIMED BY PPG. Any claim under this warranty must be made by Buyer to PPG in writing within five (5) days of Buyer's discovery of the claimed defect, but in no event later than the expiration of the applicable shelf life of the product, or one year from the date of the delivery of the product to the Buyer, whichever is earlier. Buyer's failure to notify PPG of such non-conformance as required herein shall bar Buyer from recovery under this warranty.

LIMITATIONS OF LIABILITY

IN NO EVENT WILL PPG BE LIABLE UNDER ANY THEORY OF RECOVERY (WHETHER BASED ON NEGLIGENCE OF ANY KIND, STRICT LIABILITY OR TORT) FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES IN ANY WAY RELATED TO, ARISING FROM, OR RESULTING FROM ANY USE MADE OF THE PRODUCT. The information in this sheet is intended for guidance only and is based upon laboratory tests that PPG believes to be reliable. PPG may modify the information contained herein at any time as a result of practical experience and continuous product development. All recommendations or suggestions relating to the use of the PPG product, whether in technical documentation, or in response to a specific inquiry, or otherwise, are based on data, which to the best of PPG's knowledge, is reliable. The product and related information is designed for users having the requisite knowledge and industrial skills in the industry and it is the end-user's responsibility to determine the suitability of the product for its own particular use and it shall be deemed that Buyer has done so, as its sole discretion and risk. PPG has no control over either the quality or condition of the substrate, or the many factors affecting the use and application of the product. Therefore, PPG does not accept any liability arising from any loss, injury or damage resulting from such use or the contents of this information (unless there are written agreements stating otherwise). Variations in the application environment, changes in procedures of use, or extrapolation of data may cause unsatisfactory results. This sheet supersedes all previous versions and it is the Buyer's responsibility to ensure that this information is current prior to using the product. Current sheets for all PPG Protective & Marine Coatings Products are maintained at www.ppgpmc.com. The English text of this sheet shall prevail over any translation thereof.

PDS

7791