

SIGMAGLIDE FOULING RELEASE COATING SYSTEM**3127**

a four page issue

January 2010
revision of May 2008**GENERAL DESCRIPTION**

The SigmaGlide coating system is a biocide free, silicone elastomeric, low surface energy coating to protect vessels and other immersed substrates from fouling. The SigmaGlide coating system is high gloss and colour stable.

Once applied, the SigmaGlide system forms a smooth surface to which algal and macro fouling have difficulty adhering. This fouling may settle, but friction due to water movement will cause the fouling to detach.

This fouling release mechanism does not rely on biocidal activity and therefore the SigmaGlide system is environmentally friendly and not subject to special environmental legislation.

The very smooth surface aids the fuel performance of most vessels and furthermore, because the silicone based SigmaGlide system is highly durable, extended service life is possible.

In order to get optimal benefits from the SigmaGlide system proper application under supervision of a PPG Protective & Marine Coatings Field Technical Services Representative experienced with application of fouling release systems is essential.

The specified minimum dry film thickness for both SigmaGlide 790 (Tiecoat) and SigmaGlide 890 (Finish) is 150 µm. The SigmaGlide 990 is specified with a minimum dry film thickness of 180 µm. It is important that this minimum dry film thickness is applied in order to ensure optimal performance of the system.

The SigmaGlide system can only be used over freshly applied epoxy coating. In order to make sure that under all application conditions an optimal coating system is obtained, only a few anticorrosive products are recommended as substrates for the SigmaGlide systems. These recommended anticorrosive products are given in the specifications below.

In order to have optimal benefits from the smooth surface and the long durability of the SigmaGlide system it is recommended to blast the steel surface to a minimum of ISO-Sa2½ with a blasting profile of 40-70 µm.

For recommended application instructions and repair procedure

– see working procedure –

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SPECIFICATIONS FOR IN SITU BLASTED STEEL

SPECIFICATION 1	Fouling Release system with multipurpose epoxy anticorrosive coating for Underwater and Boottop. This coating system is recommended for substrate temperatures between 10 and 20°C.	
pretreatment	steel; blast cleaned to a minimum of ISO-Sa2½, blasting profile 40-70 µm	
paint system	SigmaPrime 200 yellow/green	150 µm
	SigmaShield 610 redbrown	150 µm
	SigmaGlide 790 grey	150 µm
	SigmaGlide 990 dark red	180 µm
Notes	<ul style="list-style-type: none"> - SigmaGlide 990 dark red can be replaced by SigmaGlide 890 redbrown - for low VOC system SigmaPrime 200 can be replaced by SigmaShield 220 in a dft of 125 µm 	

SPECIFICATION 2	Fouling Release system with multipurpose epoxy anticorrosive coating for Underwater and Boottop. This coating system is recommended for substrate temperatures above 20°C	
pretreatment	steel; blast cleaned to a minimum of ISO-Sa2½, blasting profile 40-70 µm	
paint system	SigmaPrime 200 yellow/green	150 µm
	SigmaShield 620 redbrown	150 µm
	SigmaGlide 790 grey	150 µm
	SigmaGlide 990 dark red	180 µm
Notes	<ul style="list-style-type: none"> - SigmaGlide 990 dark red can be replaced by SigmaGlide 890 redbrown - for low VOC system SigmaPrime 200 can be replaced by SigmaShield 220 in a dft of 125 µm 	

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DATA FOR OVERCOATING

- surface should be dry and free from any contamination
- relative humidity should be above 40%

Overcoating table for SigmaShield 610 for dft up to 150 µm

With SigmaGlide 790

substrate temperature	10°C	20°C
minimum interval	24 hours	12 hours
maximum interval	7 days	5 days

Overcoating table for SigmaShield 620 for dft up to 150 µm

With SigmaGlide 790

substrate temperature	20°C	30°C	40°C
minimum interval	12 hours	4 hours	4 hours
maximum interval	5 days	3 days	2 days

* at temperatures between 10°C and 20°C SigmaShield 610 should be specified;
at temperatures above 20°C SigmaShield 620 should be applied

Overcoating table for SigmaGlide 790 for dft up to 150 µm

With SigmaGlide 790

substrate temperature	10°C	20°C	30°C	40°C
minimum interval	30 min.	15 min.	10 min.	10 min.
maximum interval	14 days	5 days	3 days	2 days

Overcoating table for SigmaGlide 790 for dft up to 150 µm

With SigmaGlide 990 and 890

substrate temperature	10°C	20°C	30°C	40°C
minimum interval	24 hours	12 hours	10 hours	8 hours
maximum interval	14 days	5 days	3 days	2 days

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Overcoating table for SigmaGlide 990 and 890

With SigmaGlide 990 and 890

substrate temperature	10°C	20°C	30°C	40°C
minimum interval	3 hours	2 hours	1 hour	1 hour
refloating	8 hours	8 hours	8 hours	8 hours

REFERENCES

SigmaPrime 200	see product data sheet 7416
SigmaShield 220	see product data sheet 7926
SigmaShield 610	see product data sheet 7978
SigmaShield 620	see product data sheet 7948
SigmaGlide 790	see product data sheet 7386
SigmaGlide 890	see product data sheet 7399
SigmaGlide 990	see product data sheet 7397
Explanation to product datasheets	see information sheet 1411
Safety indications	see information sheet 1430

PPG Protective & Marine Coatings' General working procedure for application of SigmaGlide

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