C-Flex 1-2-3 AF

PRODUCT DATA SHEET

SELECTION & SPECIFICATION DATA

Generic Type	High performance, tin-free, polishing antifouling
Description	High copper loading, tin-free antifouling utilizing an engineered binder matrix resulting in a controlled and effective release of biocide during operation over extended service periods. It provides long term protection and fuel efficiency in harsh marine environments.
Features	• Provides long-term, fuel efficient protection • VOC compliant • Fast dry, high production application characteristics • Indefinite maximum recoat interval • Compatible with a wide range of antifoulings
Color	Red and Black
Finish	Flat
Dry Film Thickness	102 - 152 microns (4 - 6 mils) per coat Two coats minimum - a third coat optional for even longer service.
Solids Content	By Volume 55% +/- 2%
Theoretical Coverage Rate	21.7 m²/l at 25 microns (882 ft²/gal at 1.0 mils) 5.4 m²/l at 100 microns (221 ft²/gal at 4.0 mils) 3.6 m²/l at 150 microns (147 ft²/gal at 6.0 mils) Allow for loss in mixing and application.
VOC Values	**As Supplied** : 3.34 lbs./gal (400 g/l) Thinner 236 E : 12.8 oz 3.34 lbs./gal (400 g/l) **EPA Method 24** These are nominal values and may vary with color

SUBSTRATES & SURFACE PREPARATION

General	Surfaces must be clean and dry. Employ adequate methods to remove dirt, dust, oil and all other contaminants that could interfere with adhesion of the coating.
Steel	Steel must be primed with appropriate primer as recommended for the application.
Fiberglass	Should be cleaned several times with a fiberglass de-waxer. Sand with 80-grit paper or equivalent to a dull, frosty appearance. Re-wash surface to remove sanding residue and apply 2-3 coats of antifouling.

MIXING & THINNING

Mixing	This product contains a high level of cuprous oxide. As a result, there is a tendency for settling to occur. It is necessary to thoroughly power mix before using. Check the bottom and sides of the can to ensure all the pigment has been mixed in. It is recommended to pour off half the liquid into a second container and thoroughly mix in any settled pigments. Then remix the two parts together again. Stir occasionally during use to redistribute any settling that may occur during application.
Thinning	Normally not required. May be thinned up to 10% with Thinner #236E (exempt thinner).
Pot Life	Indefinite

APPLICATION EQUIPMENT GUIDELINES

Listed below are general equipment guidelines for the application of this product. Job site conditions may require modifications to these guidelines to achieve the desired results.

Spray Application (General) | The following spray equipment has been found suitable and is available from manufacturers. Prior to use, flush all equipment with Thinner #2.

Conventional Spray | Pressure pot equipped with dual regulators, 3/8" I.D. minimum material hose, 0.070" I.D. fluid tip and appropriate air cap.

Airless Spray |
Pump Ratio: 30:1 (min.)*
GPM Output: 3.0 (min.)
Material Hose: 3/8" I.D. (min.)
Tip Size: .017-.019"
Output PSI: 1700-2100
*PTFE packings are recommended and available from the pump manufacturer.

Brush & Roller (General) | Spray application is recommended. However, application by roller is acceptable. Use a short nap mohair roller with phenolic core. Avoid rerolling. Take care to apply uniform coats.

APPLICATION CONDITIONS

Condition	Material	Surface	Ambient	Humidity
Minimum	10°C (50°F)	4°C (40°F)	4°C (40°F)	0%
Maximum	32°C (90°F)	32°C (90°F)	32°C (90°F)	95%

Do not apply when the surface temperature is less than 5°F (3°C) above the dew point. Special thinning and application techniques may be required above or below normal application conditions.
Special Note: Antifoulants are typically applied over epoxy anti-corrosive coatings. The optimum time to topcoat with an antifoulant is when the epoxy is “touch-tacky”. If the touch-tacky time has been exceeded you can generally reprime/refresh the first coat of epoxy with a fresh coat of itself (check specific data sheet). The longer the epoxy has to cure, particularly in sunlight exposure or elevated temps, the higher risk of inadequate adhesion. **If those maximum recoat times have been exceeded, the surface must be abraded by sweep blasting or sanding prior to the application of additional coats. Contact your local Carboline Marine Representative for assistance/guidance.**

CURING PROGRAM

Surface Temp.	Cure for Service	Dry to Recoat
4°C (40°F)	24 Hours	12 Hours
10°C (50°F)	18 Hours	8 Hours
21°C (70°F)	12 Hours	6 Hours
32°C (90°F)	10 Hours	5 Hours

These times are based on a 4.0 mil (50 micron) dry film thickness and 40-60% relative humidity. Higher film thicknesses, insufficient ventilation, high humidity or cooler temperatures will require longer cure times. The above times are minimum cure times.

CLEANUP & SAFETY

Cleanup | Use Thinner #2.

Safety | Read and follow all caution statements on this product data sheet and on the MSDS for this product.

PACKAGING, HANDLING & STORAGE

Shelf Life	12 months at 75°F (24°C)
Shipping Weight (Approximate)	**5's** 92 lbs
Storage Temperature & Humidity	40° -100°F (4°-38°C) 0-90% Relative Humidity
Flash Point (Setaflash)	765°F (18°C)
Storage	Store Indoors.

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