



**ESGARD**

## ESGARD BIO KOTE

<b>DESCRIPTION</b>	BIO KOTE is a non-hazardous rust preventative coating for use in all types of marine vessels. It contains no petroleum oils or solvents yet cures through oxidation to a firm film which resists wash out and which will not cause pollution problems. The coating contains active corrosion inhibitors and bactericides. BIO KOTE is yellow in color to facilitate application. Do not use with potable water.
<b>FIELD OF APPLICATION</b>	Ballast tanks, void areas, cofferdams, pre-load tanks, anchor chains, chain lockers, etc.

### TECHNICAL DATA

FILM PROPERTIES	Yellow liquid which cures through oxidation to a firm film.	
TYPE	Rust preventative non-petroleum oil	
DENSITY	9.29 lbs/gal (1.11 kg/l)	
VOLUME SOLIDS	100%	
FLASH POINT	485°F (252°C) COC	
COVERAGE (Theoretical)	160 ft <sup>2</sup> /gal at 10 mils 3.9 m <sup>2</sup> /l at 250 microns	
DRY TIME @ 70°F (21°C)	Surface tack:	1 – 3 days
	Complete cure:	7 – 10 days
TEMPERATURE RANGE	Up to 250°F (125°C)	

**PRODUCT AMOUNT** To determine the amount of BIO KOTE required, calculate the surface to be coated (bulkheads, overheads and decks). Add to this figure allowances of up to 500% for internal structures. For new steel, divide this figure by 125 square feet per gallon at 10 - 15 mils average film thickness. (3 square meters per liter at 250 – 400 microns) to obtain gallons (liters) required. For older, corroded surfaces, coverage should be reduced to 100 square feet per gallon at 10 – 15 mils (2.45 square meters per liter at 250 – 400 microns).

**SURFACE PREPARATION** Remove all oil, grease, mill scale, rust, loose paint, loose coatings and debris. Hard scale should be removed to standards of St2, St3, SSPC-SP2 or SSPC-SP3 using hand or power tools or DW2 when hydro jetting. Hard scale is defined as adhering scale that cannot be removed by scraper or knife (ISO8501-1). Existing coating should be firmly adhering to the steel. BIO KOTE can be applied over rusty, scaly surfaces but will promote descaling of surfaces not properly prepared. The better the surface preparation, the more effective the coating will be.



## APPLICATION

**BIO KOTE** can be applied over marginally prepared surfaces via application. The steel surfaces should be as dry as possible. APPLY AS SUPPLIED. DO NOT THIN OR DILUTE. If the coating is cold and viscous (thick), heating can be used to reduce viscosity. Use approved practices such as heater bands or hot rooms.

Use airless equipment with a minimum 35:1 ratio and capable of at least 3 gpm (11 liter) continuous delivery output. A 3/8 inch or larger material hose with a 1/4 inch whip and swivel is also recommended. The spray gun should be equipped with a .027 – .031 tip providing a good spray pattern and no unnecessary misting.

Special attention should be given to all pitted areas, welds, lips, sharp edges and areas difficult to see or reach with one stripe coat at a wet film thickness of 3 – 4 mils (75 – 100 microns). Follow immediately with a full finish coat using a cross-hatched spray pattern to achieve a wet film thickness of 10 – 15 mils (250 – 400 microns). BIO KOTE's yellow color is designed to hide the steel surface when coating is over-applied. Upon sufficient film thickness, coating should be translucent and underlying surface should be barely visible. DO NOT OVER-APPLY. OVER-APPLICATION DOES NOT ENHANCE COATING PERFORMANCE.

Although BIO KOTE contains no solvents, it will skin-over to a firm, tacky surface and will eventually cure through. There should be sufficient time for a surface tack (normally 1 – 3 days @ 70°F) to occur prior to ballasting. Curing is complete within 7 – 10 days @ 70°F. Colder temperatures slow surface tack and cure.

## RE-APPLICATION

Areas coated with BIO KOTE should be checked after 3 – 6 months. Bare or newly descaled surfaces should be recoated at such time. Remember, BIO KOTE will promote descaling. The initial amount of rust scale and surface preparation determine the amount of descaling.

## CLEAN UP AND

To remove BIO KOTE from steel, determine which of the following is most effective;

## REMOVAL

Butterworth, high pressure hydro jetting or hand scraping. Cleanup equipment with varsol, mineral spirits, painter's naphtha, paint thinner, etc. Personal clean up with soap and water..

## CAUTION

**FOR INDUSTRIAL USE ONLY!** Although BIO KOTE is not hazardous, good safety practices and common sense should be used. Safe application practices should include the use of respirators, eye protection, adequate lighting and ventilation. BIO KOTE will not sustain combustion but caution should be used near flames.

## SAFETY

Refer to Material Safety Data Sheet supplied with each order.

## FIRST AID

Refer to Material Safety Data Sheet supplied with each order.