BIO-GARD™ 488

HEAVY DUTY
EPOXY PROTECTION

Thin Film Technology, Inc.

PRODUCT DATA SHEET

BIO-GARD 488 is formulated from a combination of an extremely tough solid epoxy resin emulsion and an advanced water based curing agent which gives outstanding adhesion to painted or bare metal surfaces.

High quality pigmentation assures excellent performance under harsh industrial or marine exposures. BIO-GARD 488 is available in a variety of standard "House Colors" to match widely used industrial shades.

Minimal VOC content and simple water clean-up is environmentally responsible and economical in use. BIO-GARD 488 is not flammable and "NonHazmat" for shipping and storage. Application is easily made using brush, roller airless or conventional spray.

RECOMMENDED USES

ANTICORROSIVE FINISH COATING: An excellent all around finish coating designed for heavy equipment in aggressive Industrial or Marine service.

CONCRETE COATING: Easily applied, very tough and adherent coating for concrete.

TECHNICAL INFORMATION

COMPOSITION:	Vehicle Type…….……..	Epoxy/Polyamines
	Pigmentation…….……	Color/Inert
	Solids by Volume……	55%
	Flash Point ……	None
	VOC…….	Approximately 125 grams/liter – varies with shade
APPEARANCE:	Gloss ……...	Glossy smooth surface
	Color……	Standard industrial shades are available
APPLICATION:	Methods ……...	Brush, roller airless or conventional spray
	Rec. Dry Film Thickness . ……	2 - 4 mils, (50 - 100 microns)
	Rec. Wet Film Thickness…….	3.6 – 7.2 mils, (90-180 microns)
	Coverage, (theor.) . ……...	294 sq.ft./gallon @ 3 mils dry thickness
	Induction Time ……	Not Required - may be used immediately after mixing
	Pot Life…….	Approx. 2 hours @ 77'F, (25'C)
	Dry Time – Dust Free ……...	15 mins @ 77'F, (25'C)
	Dry Time - Service……...	12 hours handling @ 77'F, (25'C)
STORAGE:	Shelf Life……...	24 months under normal storage conditions
TRANSPORTATION…	……...	USDOT, IATA, & IMO "Non-Regulated"-(00000version)

APPLICATION NOTES

SURFACE PREPARATION: This may be accomplished in several different ways:

Bare Concrete: surfaces should be allowed to cure for a minimum of 20 days before coating. Weak surface laitance must be removed by either acid etching or, preferably, abrasive sweeping before coating. Aged, uncoated concrete surfaces are best prepared by abrasive sweeping. Unless carried out properly acid etching can give unpredictable results due to inadequate etching or inadequate rinsing, for this reason abrasive blasting is the preferred method of preparation. Contamination by oil or grease should be removed with an industrial degreaser before abrasive blasting or acid etching.

Coated Concrete: with worn but generally sound coatings may be coated after a thorough and vigorous cleaning with aggressive cleaner. Note: BIO-GARD 488 will not soften existing coatings however the ultimate strength of the coating system will be determined by the strength and adhesion of the residues of existing coatings. If the integrity of the existing coatings is doubtful they should be removed by abrasive blasting or other mechanical means to ensure good results from the fresh BIO-GARD 488 application.

Previously coated surfaces: BIO-GARD 488 has been found to have excellent adhesion to all generic types of coatings. As noted above if the integrity of the existing coatings is doubtful they should be removed by abrasive blasting or other mechanical means to ensure good results from the fresh BIO-GARD 488 application.

Metallic Substrates: are best prepared by abrasive blasting however small areas may be cleaned using grinders or needle guns.

MIXING PROCEDURE: BIO-GARD 488 is supplied in kits of comprising premeasured epoxy and separate curing agent. A 1/2" "Jiffy" type mixer with a high torque motor is recommended for proper blending. Pour the curing agent into the base and mix for about 2 minutes taking care to stir in all base material from the edges and base of the plastic pail. No induction or "sweat-in" time is required and the mixed material may be used immediately.

Pot life and reaction time is heavily dependent on temperature, as a general guide figure that each 18'F, (10'C), variation in temperature above or below 77'F, (25'C), will respectively halve or double the pot life and cure times.

APPLICATION: BIO-GARD 488 is a relatively low viscosity product easily sprayed using standard industrial equipment. Conventional air spray is recommended for detail work such as industrial equipment whereas airless spray operated at a fluid pressure of 2,500 psi and tip sizes of about 13 thou" orifice are ideal for large surfaces.

CURING BEFORE SERVICE: BIO-GARD 488 will cure to a hard film within about 12 hours and is suitable for traffic after this time. Allow at least three (3) days at 77'F before subjecting to aggressive chemical service from industrial solvents and similar materials.

WE URGE YOU TO READ THE MATERIAL SAFETY DATA SHEET (MSDS) BEFORE USING PRODUCT AND TO CALL THIN FILM TECHNOLOGY, INC. AS NECESSARY FOR ADVICE OR INFORMATION BEFORE ANY ACTUAL OR CONTEMPLATED APPLICATION.

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