BIO-DUR® 561SW

FOR APPLICATION ABOVE OR BELOW WATER

Thin Film Technology, Inc.

PRODUCT DATA SHEET

BIO-DUR® 561SW is based on a unique blend of liquid epoxy polymer and aliphatic polyamine curing agents, which is able to displace water from wet surfaces in order to make a permanent bond. The formulation is solvent-free to ensure safety and maximum technical performance. Kevlar®* fibers are incorporated for reinforcement and viscosity management to achieve high application rates -even underwater!

BIO-DUR® 561SW provides permanent protection under the most adverse conditions. The formula is uniquely field-friendly and uses advanced low toxicity ingredients. All colors including White are available and can be shipped "Non-Regulated" by USDOT, IATA and IMO.

* ***Kevlar is a trademark of*** *E. I.* ***DuPont*** *de* ***Nemours Co***

RECOMMENDED USES

ANTICORROSIVE COATING: Splash zone, abrasion resistance above or below water.

REPAIR COMPOUND: Patching, leak sealing etc. above and below water.

FAIRING COMPOUND: Smoothing rough steel and concrete.

CONCRETE COATING: Sealing concrete especially in the splash-zone of structures such as bridges.

TECHNICAL INFORMATION

VEHICLE TYPE ……	Epoxy/Aliphatic amines
PIGMENTATION ……	Color/Inert/fibrous reinforcement
COLORS ……	Standard White, Black, Gray – other available
FINISH ……	Slight texture
THINNER ……...	Not normally required
CLEANER ……...	MEK or lacquer thinner
MIXING RATIO ……	1.0/1.0 v/v
INDUCTION TIME . ……	Not required
POT LIFE ……	Approx. 45’ / 77°F
FLASH POINT ……	Over 200°F
SOLIDS BY VOLUME ……	100%
SPREADING RATE/GAL……	1604 mil/sq. ft./gal, 40 sq. ft./gal @ 40 mils
DRY TIME, (Dust free) …….	4 hours at 77°F
DRY TIME, (Service)……	14 hrs. light, 72 hrs. heavy
APPLICATION METHOD……..	Trowel, “Pool float”, mitts
STORAGE CONDITIONS……	Normal, Freezing OK
VOC. …….	Essentially zero

APPLICATION NOTES

SURFACE PREPARATION BELOW WATER: Remove marine biological settlement and corrosion by high-pressure water jetting with or without abrasive. Conventional air/abrasive blasting works well at shallow depths; however, efficiency falls off sharply below about 10'. Hand held power tools such as needle guns or grinders can give good results if applied conscientiously in small areas but will be inadequate in large areas. Plan to apply the BIO-DUR® 561SW within 45 minutes maximum after surface preparation to minimize rerusting or initial settlement of fouling slime, which interferes with initial adhesion.

SURFACE PREPARATION ABOVE WATER: Application above water requires similar high pressure water blasting or dry abrasive blasting to yield a firm, granular surface free of loose contamination. Since there is no problem from resettlement of marine fouling when working above water it is possible to delay application of the BIO-DUR 561SW indefinitely provided fresh contamination of the surface does not occur.

MIXING PROCEDURE: BIO-DUR® 561SW is supplied either in 2 gallon or 4 gallon kits of 2x1 or 2x2 gallon containers respectively each of epoxy base and curing agent. These components are formulated in contrasting colors to facilitate complete mixing. "Black" BIO-DUR® 561SW for example is supplied with a jet black epoxy base and an off-white curing agent which mix together to yield a black mixture, visible streaks of either black or white seen during the course of mixing indicate "hotspots" of unmixed components.

Remove equal quantities of base and curing agent from their cans and place them side-by-side on a surface of plastic, fiberboard etc. Mixing is easily accomplished by folding the components into each other using a spatula or piece of wood. Once mixing begins there will be about 45 minutes of working time available at 80°F. This time may be extended by keeping the components and mixture cool, send the mixed material underwater as quickly as possible rather than leaving it on a hot deck.

APPLICATION:

1) UNDERWATER Take the mixed BIO-DUR® 561SW underwater in a can or bucket, it will free up a hand to have a hook on a belt to hold the can during painting especially if visibility is poor and a lantern has to be carried. Applicators such as broad putty knives or plastic straight-edged glue spreaders work well on most surfaces. Painters' mitts work well on small diameter tubular sections such as risers. BIO-DUR® 561SW is resistant to the effects of wave application during curing and will be found to be easier to apply than traditional "splash-zone" compositions and much less messy than lower viscosity underwater "paints". BIO-DUR™ 561SW has a strong tendency to stick to underwater surfaces and expensive equipment should be protected using plastic suits or sacks to cover exposed surfaces.

2) ABOVE WATER: Apply using an appropriate tool such as a spreader or short, stiff brush if the surface is especially rough.

CURING BEFORE SERVICE: BIO-DUR® 561SW may be immersed in fresh or salt water immediately after application. If exposure to aggressive chemical environments is anticipated it is recommended to use BIO-DUR® 561.

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

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