

894- Container Hi Build

PRODUCT DESCRIPTION AND USES

Protective Paints Container Hi Build is a single pack physical drying high build coating used for the repair and maintenance of shipping containers. Container Hi Build is an anti-corrosive, self priming coating designed for fast economical repair work. The coating is based on an acrylic modified alkyd, incorporating non chlorinated plasticisers.

PHYSICAL PROPERTIES

Colour/Texture	Wide range of colours. Satin finish
Volume Solids	46%
Product Density	1.3kg/litre (White)
Drying Time	Touch Dry: 2-3 hours Hard Dry: 4-6 hours
Recoat Time	1-2 hours
Flash point	26°C

SURFACE PREPARATION

The single most important function that can influence paint performance is the quality of surface preparation. For optimum service life, the surface must be completely free of all contaminants that might impair performance and should be so treated as to assure good and permanent adhesion of the paint system. The importance of surface preparation cannot be over-emphasised; indeed the paint system and the surface preparation should always be related to one another. The most important methods employed to prepare surfaces for paint application in modern shipyards are as follows:-

Degreasing: Used to remove oil, grease, etc., from steel surfaces. Use can be made of solvents (usually done by wiping surfaces with rags dipped in solvent), or by use of appropriate detergents. Both methods should be used with care (especially to ensure that no detergent remains on the surface after cleaning to affect subsequent paint adhesion).

High Pressure, Fresh Water Washing: This method is used routinely on ships in dry-dock to clean the underwater area of fouling (the harder acorn barnacle fouling resists this technique), loosely adhering paint corrosion products and especially salts which permeate the pores of exhausted antifoulings and may threaten the adhesion of new applied paint.

Hand Tool Methods: Tools commonly used are chipping hammers, scrapers, chisels, etc. and these are all used to free the surface from loosely adhering rust and paint. The surface should then be wire brushed and dust removed by suction. This seldom happens in practice and hand tools are now used to provide only a very rudimentary token to surface preparation prior to application of paint.

Mechanical Methods: These methods usually make use of power-driven tools such as needle guns, rotary wire brushes and abrasive disc sanders. Care should be taken not to burnish the surfaces to a significant extent as paints may not adhere satisfactorily to a very smooth surface.

Although mechanical methods are generally quicker than hand cleaning and give a higher degree of cleanliness, they are much more expensive and slower than blast cleaning for the preparation of large surfaces and should therefore be used only for local repairs, removal of rust spots and treatment of damaged or burnt areas and weld seams.

The Swedish standards for surface preparation by mechanical methods gives St 3 as the most acceptable grade for use on underwater areas, St 1 and St 2 are generally not acceptable for these areas.

Blast Cleaning: In this method, an abrasive jet of particles in a compressed air stream impinges on the surface, removing impurities, mill scale, rust and old paint. Abrasive blast cleaning is the most thorough and widely used method of surface preparation in the ship building and repair industry. Different degrees of surface cleanliness are possible and depend in part on the surface condition prior to treatment and also to the length of time for which the surface is exposed to the abrasive jet. In addition to cleaning the surface, the abrasive particles will impact a surface roughness to the steel. This so-called "profile" roughness can be a very important "key" for the anchoring of the paint system.

Mineral slag blasting grit generally gives faster rates of cleaning and lower health risk (from shattered grit) than does sand. Grit also gives more effective cleaning, especially for pitted substrates, and some can be recycled. Particle size for the most widely used (for general cleaning) grit is 0.5 to 1.5 mm diameter.

The quality of surface resulting from blast cleaning has been defined by several bodies - American (ASTM D2200 and SSPC Vis. 1 & 2), British Standard (BS 4232), German (Standard DIN 18364) and Japanese (JSRA SPSS, 1975). The most widely used, however, in the industry today is the Swedish Standard (SIS 05 59 00 - 'Pictorial surface preparation standards for painting steel surfaces') which also sought to define the initial condition of the steel. After blasting and vacuum cleaning of the dust four grades were defined:-

SA1: In this 'brush-off or "sweep" blast, the jet is passed rapidly over the surface so that loose mill scale, rust and foreign matter are removed.

SA 2: This is a more thorough blast-cleaning in which the jet is held over the surface long enough to remove all rust and mill scale and nearly all foreign matter. The surface should be a dull grey colour.

SA 2 1/2: This is a very thorough blast-cleaning with the jet maintained long enough to ensure that mill scale, rust and foreign matter are excised to an extent that only slight shadows of discolourations remain.

APPLICATION DATA

Recommended D.F.T	100 microns
Recommended W.F.T	220 microns
Theoretical Spreading Rate	4-6m ² /litre @ 100 microns D.F.T
Thinners	Rolling/Brushing: K9 (5-10%) Airless Spray: K9 (5%)
Airless Spray	Nozzle Orifice: .017-.021mm Nozzle Pressure: 175 bar/2500 psi

HEALTH AND SAFETY

Irritant

Avoid contact with skin and eyes. Avoid breathing vapour or sanding dust. When using this product it is recommended that full overalls, gloves, face mask and goggles be worn. Store container in a safe place when not in use. Do not burn container.

FIRST AID**EYES**

Flush with water for at least 15 minutes and seek medical advice.

SKIN

Wash contact areas with soap and water. Remove all contaminated clothing, and seek medical advice. Do not scrub.

INHALATION

Remove patient from further exposure, and keep patient warm and comfortable.

INGESTION

Do not induce vomiting. Rinse mouth with water. Seek medical advice as soon as possible.

TRANSPORTATION AND DISPOSAL

Class

3

Hazchem Code

•3YE (3); •3Y

UN No

1263

Packing Group No

III

Fire Extinguishing Media

CO₂, Foam, Dry Chemical

Fire Fighting Procedure

Fire fighters should wear self contained breathing apparatus. Fight fire from a protected location as product may explode on heating. The vapours are heavier than air, so may travel along the ground to accumulate in low areas. Fire may flash back along vapour trail, and can also react with oxidising agents.

Spills should be cleaned up immediately by using sand or other non-flammable absorbent materials. Ensure material does not enter waterways.

Dispose of empty containers in accordance with local by laws.

OTHER INFORMATION

This product may be used for a wide variety of surfaces. If the surface you propose to paint is not referred to, contact Protective Paints Technical Department for classification.

For further technical information please phone 0800 724 684.

RELIABILITY OF INFORMATION

All statements and technical information contained herein are based on tests we believe to be reliable but the accuracy thereof is not guaranteed. Since Protective Paints Ltd has no control over product application, purchasers and users must confirm the suitability of our products under their conditions to meet their own requirements.

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