

DESCRIPTION

MAXIGUARD® MGT-345 HS is a two component, solvent free epoxy which can be applied underwater, and will cure as a hand applied repair compound for application to submerged steelwork and splashzone areas of offshore jackets, piling and other permanently wet areas where conventional coatings cannot be used.

RECOMMENDED USE

MAXIGUARD® MGT-345 can also be used on concrete, glass reinforced materials, and is suitable for use at new construction as well as maintenance.

PHYSICAL PROPERTIES

- Colors : Green
- Solids by volume (mixture) : 98 ± 2 %
- Flash point (mixture) : >101°C
- Gloss level : Not applicable
- Water resistance : Excellent
- Solvent resistance : Very good
- Chemical resistance : Excellent
- Flexibility : Fair
- Product Weight : 13.2 lb/gal (1.6 kg/ l)

APPLICATION DETAILS

- Mixing ratio (weight) : Comp. A : Comp. B = 1 : 1
- Pot life (23°C) : 3 hours (Reduced at higher temp.)
- Thinner/Cleaner : Epoxy Thinner
- Method of Application : Hand moulding, Palette knife, Trowel
- Typical Thickness : 240 mils (6,000 microns) dry equivalent to 240 mils (6,000 microns) wet
- Theoretical Coverage : 6.68 sq.ft./ US gallon at 240 mils d.f.t. and stated volume solids
0.17 m²/liter at 6,000 microns d.f.t. and stated volume solids
- Practical Coverage : Allow appropriate loss factors
- Working Pot-Life : 50°F (10°C) 59°F (15°C) 77°F (25°C) 104°F (40°C)
90 minutes 75 minutes 60 minutes 15 minutes

DRYING TIME

Temperature	Touch Dry	Hard Dry	Minimum	Maximum
50°F (10°C)	Not applicable	48 hours	Not applicable	Not applicable
59°F (15°C)	Not applicable	24 hours	Not applicable	Not applicable
77°F (25°C)	Not applicable	8 hours	Not applicable	Not applicable
104°F (40°C)	Not applicable	3 hours	Not applicable	Not applicable

¹. The surface should be free from chalking and contamination prior to application. If the maximum dry to recoat time is exceeded, please contact **MAXIGUARD®** Technical Department for advice.

The given data must be considered as guidelines only. The actual drying time/times before recoating may be shorter or longer, depending on film thickness, ventilation, humidity, underlying paint system, requirement for early handling and mechanical strength etc. A complete system can be described on a system sheet, where all parameters and special conditions could be included.

SURFACE PREPARATION

The performance of this product will depend upon the degree of surface preparation. The surface to be coated must be clean, dry and free from contamination. Prior to paint application all surfaces should be assessed and treated in accordance with

ISO 8504:1992.

Accumulated dirt and soluble salts must be removed. Dry bristle brushing will normally be adequate for accumulated dirt. Soluble salts should be removed by fresh water washing.

Oil or grease should be removed in accordance with SSPC-SP1 solvent cleaning. Abrasive Blast Cleaning

Abrasive blast clean to SSPC-SP10 or Sa21/2 (ISO 8501-1:1988). If oxidation has occurred between blasting and application of Interzone 101, the surface should be reblasted to the specified visual standard.

Surface defects revealed by the blast cleaning process, should be ground, filled, or treated in the appropriate manner.

A surface profile of 3-4 mils (75-100 microns) is recommended.

When applying to bare steel substrates below water or in permanently wet conditions the surface should be prepared by power disk grinding with a carborundum disc or by needle gun to achieve a clean, roughened surface in accordance with SSPC-SP11,

Other surfaces

The coating may be used on other substrates. Please contact **MAXIGUARD**[®] Technical Department.

PRODUCT CHARACTERISTICS

MAXIGUARD[®] **MGT-345 HS** is a specialist product designed for a specific end use. Detailed application instructions for **MAXIGUARD**[®] **MGT-345 HS** are available from International Protective Coatings. Application - Onshore (New Fabrication, Dry Conditions)

Application is by hand moulding. Applicators must wear rubber nitrile gloves and appropriate skin protection. Gloves may be moistened with water to assist in application and stop **MAXIGUARD**[®] **MGT-345 HS** from sticking to the gloves.

When applying the coating it is advisable to use a depth mark. Fix a $\frac{3}{8}$ " (9 mm) band or strip to the surface at intervals and work the coating up to these marks. Smooth the coating with rubber/ nitrile gloves or rollers using a little water on the coating surface to prevent sticking. Do not incorporate water into the coating.

Check the overall film thickness by pressing a sharp spike marked at 1/4" (6 mm) into the coating. Any thin areas can then be built up and spike marks, air bubbles, etc., repaired. It is advisable not to aim for a cosmetic, smooth finish but to ensure a 1/4" (6 mm) film with no defects. A PVC mesh can be used to assist application. The temperature of the substrate should be minimum 15°C and at least 3°C above the dew point of the air. The temperature and the relative humidity should be measured in the vicinity of the substrate. Good ventilation is usually required in confined areas to ensure proper drying. The coating should not be exposed to oil, chemicals or mechanical stress until fully cured.

Application - Offshore (Intermittently Wet Area)

- (1) Use PVC mesh cut to size and wrapped tightly around the substrate. Use wire to secure the mesh firmly so that it does not slip. All wire must be tacked under the mesh. After mixing force the **MAXIGUARD**[®] **MGT-345 HS** well into the mesh using gloved hands.
- (2) Lay a sheet of PVC cloth on the ground and coat with **MAXIGUARD**[®] **MGT-345 HS** to approx. 1/4" (6 mm). Place the coated PVC onto the steel and wrap around the substrate using a rope or wire to keep it in place. The PVC sheet can be peeled off after the coating has cured.

Application - Underwater

This is a fairly difficult technique which requires thorough planning. For small areas, 2-3" (5.0-7.5 cm) diameter, small, handleable quantities of **MAXIGUARD® MGT-345 HS** should be mixed and then taken by diver to the area to be repaired. For larger areas either of the methods described above can be used. Always ensure small amounts of material are fully adherent to the substrate before progressing.

When **MAXIGUARD® MGT-345 HS** has exceeded its working pot life the product commences curing, it becomes rubbery, and this change in character can be easily observed. At this stage the product must be discarded. Further material must not be mixed on top of cured or curing material. Therefore use a fresh surface for mixing or thoroughly clean the surface with solvent.

Due to the presence of low molecular weight chemicals in the formulation, some VOC may be recorded when this product is tested in accordance with the UK-PG6/ 23(92), Appendix 3 and USA-EPA Method 24 protocols. This is due to the high temperatures used in the test procedures.

ADDITIONAL INFORMATION

Further information regarding industry standards, terms and abbreviations used in this data sheet can be found in the following sections of the International Protective

Coatings data manual:

- Definitions & Abbreviations
 - Surface Preparation
 - Paint Application
 - Theoretical & Practical Coverage Individual copies of these information sections are available upon request.
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STORAGE AND HANDLING

STORAGE : The product must be stored in accordance with national regulations. The product should be kept in a cool and well ventilated place, protected from heat and direct sunlight. Containers must be kept tightly closed.

HANDLING : Handle with care. Stir well before use.

PACK SIZE : 10 Kg-set

HEALTH AND SAFETY

This product is intended for use only by professional applicators in industrial situations in accordance with the advice given on this sheet, the Material Safety Data Sheet and the container(s), and should not be used without reference to the Material Safety Data Sheet (MSDS) which International Protective Coatings has provided to its customers.

All work involving the application and use of this product should be performed in compliance with all relevant national, Health, Safety & Environmental standards and regulations.

In the event welding or flame cutting is performed on metal coated with this product, dust and fumes will be emitted which will require the use of appropriate personal protective equipment and adequate local exhaust ventilation.

If in doubt regarding the suitability of use of this product, consult International Protective Coatings for further advice.

DISCLAIMER

The information in this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. However, as the product is often used under conditions beyond our control, we cannot guarantee anything but the quality of the product itself. We reserve the right to change the given data without notice.
