

MasterProtect® 1892

High performance corrosion resistant vinyl ester coating

DESCRIPTION

MasterProtect 1892 is a high performance epoxy vinyl ester corrosion resistant protective system comprising of separate primer and top coat. In addition to excellent physical strength, impact and thermal shock resistance MasterProtect 1892 also exhibits superior resistance to acids, alkalis, hypochlorites and many solvents. MasterProtect 1892 is roller applied in combination with a heavy duty reinforcing layer of fiberglass cloth. Supplied as a two-pack system comprising of filled resin and hardener, it requires only on site mixing to produce an easily applied decorative and chemically resistant finish.

Ultimate strength is developed within three days. **MasterProtect P 1895** primer is used to ensure excellent bond strength to concrete and steel.

PRIMARY USES

MasterProtect 1892 system offers maximum corrosion and temperature resistance protection to concrete and steel structures against acids, alkalis, hypochlorites and solvents.

MasterProtect 1892 can also be used as a gas and vapor barrier. Other usage areas include oil refineries, paper mills, power stations, garages, tanks, hospitals, sugar refineries, hangars, laboratories and most liquid containment areas. Contact your Master Builders Solutions representative for further advice.

APPREARANCE AND FINISH

Matt, heavy bodied, ultra dense surface. Hygienic and easily cleaned. Standard color is light grey.

ADVANTAGES

- Durable
- Service temperature up to 105°C*
- Non-toxic
- Waterproof and protective
- High chemical resistance
- Exceptional adhesion to concrete and steel
- High build coating
- Easily applied by brush or roller

PACKAGING

MasterProtect 1892 system comprises of **MasterProtect P 1895** and **MasterProtect 1892**. These components are supplied in 5kg and 20 kg units.

TYPICAL PROPERTIES* APPLICATION PROCEDURE SURFACE PREPARATION

Steel:

All previous surface treatments should be removed taking the surface back to base metal. The base metal should be abraded and preferably shot blasted with grit, steel shot or proprietary abrasive. Steel surface should be grit blasted according to specifications to meet a minimum profile of 70 µm

Cleaning with solvent or a strong detergent is advisable to ensure surface is free from grease etc. Following surface preparation, one coat of MasterProtect P 1895 should be applied at a film thickness of approximately 150 μ m. Do not allow surface to re-oxidise before application of **MasterProtect P 1895**.

Concrete:

Ensure concrete is free from excessive laitance, grease, oil, curing compound, etc. Ensure concrete is sound, cutting back where necessary and making good using suitable Master Builders Solutions's **MasterBrace** repair systems.

Ensure all blow holes and surface imperfections are made good prior to application of the **MasterProtect 1892** coating.

Ensure concrete is at least 28 days old and has a minimum compressive strength of 25 MPa and has a moisture content of less than 2% by mass of concrete. Contamination by oil, grease, fats etc. must be removed before other forms of preparation begin. Remove laitance to expose blow holes, by light grit blasting and prime grit blasted surface with <code>MasterProtect P 1895</code> Primer prior to application of <code>MasterProtect 1892</code> to ensure proper adhesion to concrete surface.

MIXING

MasterProtect P 1895 primer is supplied in two pre-weighed components, liquid resin and catalyst. Add catalyst contents to the liquid resin and mix thoroughly using a slow speed drill fitted with a suitable mixing paddle.



MasterProtect® 1892

High performance corrosion resistant vinyl ester coating

MasterProtect 1892 is supplied in two pre-weighed components, base and catalyst. No additions or omissions are required. Add catalyst contents to the base component and mix thoroughly using a slow speed drill fitted with a suitable mixing paddle until a uniform streak free color is achieved.

APPLICATION

Substrate temperature to receive MasterProtect 1892 should be at above 10°C for proper application. Prime concrete surface with <code>MasterProtect P 1895</code> to 300 μm thick (WFT). Ensure that the surface is tack free before proceeding. Apply top coat to 400 μm thick (WFT) per coat. It is recommended that <code>MasterProtect 1892</code> coating be applied in two coats of contrasting colors to ensure complete coverage. Aim for a total dry film thickness of top coat and primer to be between 750 μm to 1.0mm.

MasterProtect 1892 coating can be applied using good quality rollers or short haired brushes or by airless spray

AIRLESS SPRAY

For application by airless spray, use a 45:1 or higher ratio pump, minimum 9mm dia. hoses and HD tip 19-23 thou.

OVERCOATING

Where areas need to be over coated due to damage etc. it is important that the areas to be treated are well abraded using a stiff rotary wire brush or coarse sand paper to give an adequate key. Completely strip off any unsound coating and proceed with over coating as for new work.

CHEMICAL RESISTANCE

MasterProtect 1892 is resistant to the following typically encountered chemicals up to 100°C

- Acetic Acid. 25% concentration
- Aluminum Chloride, 100% concentration
- Aluminum Chlorohydroxide, 50% concentration
- Ammonium Thiocyanate, 20% concentration
- Barium Chloride, 100% concentration
- Benzene Sulfonic Acid, 30% concentration
- Carbon Monoxide Gas, 100% concentration
- Hydrochloric Acid, 15% concentration

- Lactic Acid, 100% concentration
- Mineral Spirits, 100% concentration
- Aviation hydraulic fuels (Skydrol)
- Motor Oil, 100% concentration
- Phosphoric Acid, 100% concentration
- Sea Water, 100% concentration
- Sulfuric Acid, 25% concentration
- Vinegar, 100% concentration
- Ammonium Hydroxide, 28% concentration (resistant up to 52°C)
- Urea (saturated solution), resistant up to 82°C
- Sodium Hypochlorite, 15% concentration (resistant up to 66°C)

THEORETICAL THICKNESS

Film thickness WFT DFT MasterProtect P 1895 300 μm 150 μm MasterProtect 1892 400-567 μm 300- 425 μm

(top coat)

APPLICATION COVERAGE

 $\begin{tabular}{lll} & Coverage \\ \begin{tabular}{lll} Master Protect P 1895 (primer) & 0.30 kg/m^2 \\ \begin{tabular}{lll} Master Protect 1892 & 0.6-0.85 kg/m^2 \\ \end{tabular}$

PACKAGING

MasterProtect P 18955 and 20 kgMasterProtect 189220 kgHardeneras required

EQUIPMENT CARE

All equipment must be cleaned immediately after use with **MasterTop THN 2**. Similar cleaning procedures should be adopted for break periods exceeding 10 minutes duration.

STORAGE AND SHELF-LIFE

Store under cover out of direct sunlight and protect from extremes of temperature and fire hazard. In tropical climates the product must be stored in an air conditioned environment. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging. Shelf life of **MasterProtect** resins, hardeners and primers is three months at 20°C.



MasterProtect® 1892

High performance corrosion resistant vinyl ester coating

Due to the limited shelf life of **MasterProtect** resin Master Builders Solutions will not warranty shelf life and will not accept any material returns. For specific storage advices consult Master Builders Solutions's Technical Services Department.

SAFETY PRECAUTIONS

As with all chemical products, care should be taken during use and storage to avoid contact with eyes mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention. Keep away from children & animals. Reseal containers after use. For further information, refer to material safety data sheet.

NOTE

Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local Master Builders Solutions representative.

Master Builders Solutions reserves the right to have the true cause of any difficulty determined by accepted test methods.

QUALITY AND CARE

All Master Builders Solutions Products are manufactured under a management system independently certified to conform to the requirements of the quality, environmental and occupational health and safety standards of ISO 9001 and Master Builders Solutions ESHQ recommendations.

* Properties listed are based on laboratory controlled tests.

® = Registered trademark of the MBCC-Group in many countries

CONTACT

Should you require any further information, please do not hesitate to contact us:

www.master-builders-solutions.com/en-sa enquirycc.saudi@mbcc-group.com M: +966 13 853 8600

Master Builders Solutions Saudi Arabia for Manufacturing LLC.

P.O. Box 1884, Al Khobar, KSA

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this Master Builders Solutions publication are based on the present state of our best scientific and practical knowledge. As the information herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by law. The user is responsible for checking the suitability of products for their intended use

Disclaimer:

In view of widely varying site conditions and fields of application of our products, this technical data sheet is meant to provide general application guidelines only. This information is based on our present knowledge and experience. The customer is not released from the obligation to conduct careful testing of suitability and possible application for the intended use. The customer is obliged to contact the technical help-line for fields of application not expressly stated in the technical data sheet under "Fields of Application". Use of the product beyond the fields of application as stated in the technical data sheet without previous consultation with Master Builders Solutions and possible resulting damages are in the sole responsibility of the customer.

All descriptions, drawings, photographs, data, ratios, weights i.e. stated herein can be changed without advance notice and do not represent the condition of the product as stipulated by contract. It is the sole responsibility of the recipient of our products to observe possible proprietary rights as well as existing laws and provisions. The reference of trade names of other companies is no recommendation and does not exclude the use of products of similar type. Our information only describes the quality of our products and services and is no warranty. Liability is accepted for incomplete or incorrect particulars in our data sheets only in the event of intent or gross negligence, without prejudice to claims under product liability laws.