

MasterProtect[®] 1815

A non-toxic, flexible high build, epoxy polysulfide coating

DESCRIPTION

MasterProtect 1815 is a protective flexible high build epoxy polysulfide resin coating specifically developed to protect concrete and steel from contact with aggressive chemicals, oils, mild acids, solvents and has a broad spectrum of chemical resistance. Supplied as a two-pack system, comprising pigmented base and a hardener, it requires only on site mixing to produce an easily applied decorative and chemically resistant finish.

PRIMARY USES

For the internal protection of concrete or metal tanks containing sewage, sludge, certain chemicals, oils and fuel. Contact your Master Builders Solutions representative for further advice.

As an impervious, resilient and chemically resistant floor or wall coating and as a gas and vapour barrier.

As a protective and decorative coating in laboratories, abattoirs, etc. Other usage areas include oil refineries, paper mills, power stations, marine applications, garages, hospitals, hangars and most liquid containment areas.

APPEARANCE AND FINISH

High gloss, heavy bodied, ultra dense surface. Hygienic and easily cleaned. Standard colors are silver grey and window grey.

ADVANTAGES

- Superior chemical resistance
- Waterproof and protective
- Durable
- UV resistant
- Easily applied by brush or roller
- Flexible
- Tough

PACKAGING

MasterProtect 1815 is supplied in 4L & 10 Ltrs units.

TYPICAL PROPERTIES

Volume Solids	100%
Mixed Density at 25°C	1.286 kg/l
Pot Life at 25°C	45 min
Tack free time at 25°C	6h
Full cure at 25°C	7 days
Inter-coat time at 25°C	9h
Tensile strength at 7 days ASTM D638	24 MPa
Elongation at 7 days ASTM D638	4%
Hardness (Shore D) ASTM D2240	82
U/V resistant (500h Xenon Arc) ASTM G53-58	Resistant
Adhesion to steel	Excellent
Adhesion to concrete	Concrete failure

APPLICATION PROCEDURE

SURFACE PREPARATION:

Surfaces must be clean and dry. Use suitable methods to remove dirt, dust, oil and all other forms of contamination that could interface with the adhesion of the coating.

CONCRETE:

Concrete must be cured for 28 days. Mechanically surface profile the substrate to CSP3 as described by the International Concrete Repair Institute. Voids and pinholes must be repaired with suitable products from the MasterBrace range. Porous concrete should be primed with **MasterSeal P 659**.

STEEL:

Prepare to SSPC-SP6. Surface profile 50 – 75 micron. Do not allow surface to re-oxide before application of **MasterProtect 1815**.

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MIXING:

MasterProtect 1815 is supplied in two preweighed components, base and reactor. No additions or omissions are required. Add reactor contents to the base component and mix thoroughly for at least 3 minutes using a slow speed drill fitted with a suitable mixing paddle until a uniform streak free color is achieved.

APPLICATION

MasterProtect 1815 coating can be applied using good quality rollers or short haired brushes or by airless spray. **MasterProtect 1815** should be applied in two coats of contrasting colors to ensure complete coverage free of holidays. If the application is delayed more than 16 hours at 40°C or 36 hours at 20°C after the previous coat (the higher the ambient temperature, the shorter the maximum period), then the previous coat must be thoroughly abraded to give an adequate mechanical key and solvent wiped.

APPLICATION TEMPERATURE:

The quality of the final coating is dependent on the substrate and the material temperatures. A substrate temperature of min. +14°C and max. +30°C is required. Prior to application the optimal material temperature is +20°C to +25°C.

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 overcoated 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 overcoating as for new work.

CHEMICAL RESISTANCE

MasterProtect 1815 is resistant to the following typically encountered chemicals:

- Chlorine Water – 50ppm
- Deionized Water
- Gasoline
- Diesel fuel
- Phosphoric Acid 20%
- Vegetable Oil
- Sodium Chloride Saturated
- Hydrochloric Acid 5%
- Sulfuric Acid 10%
- Calcium Hydroxide Saturated
- Isopropanol
- Sodium Hydroxide 50%
- Nitric Acid 20%
- Acetic Acid 10%
- Lactic Acid 10%
- Ammonium Hydroxide 30%
- Formaldehyde 37%

EQUIPMENT CARE

All equipment must be cleaned immediately after use with **MasterTop Thinner No. 2**. Similar cleaning procedures should be adopted for break periods exceeding 15 minutes duration.

SPECIFICATION CLAUSE

Where indicated, apply **MasterProtect 1815** protective epoxy polysulfide coating as manufactured by Master Builders Solutions, or similar approved to the following specification:

Composition: Two component, non-toxic, pigmented epoxy polysulfide resin based compound.

Coverage: Two coats at 0.25L/m²/coat.

Dry film thickness: 500 microns

STORAGE

Store under cover out of direct sunlight and protect from extremes of temperature. 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. For specific storage advice, consult Master Builders Solutions's Technical Services Department.

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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.

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CONTACT

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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.

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