

MasterShield CHR 360

Acid resistant high build novolac coating

Material Description

MasterShield CHR 360 is two-pack, high-build, solvent-free novolac based coating system designed to provide exceptional chemical and mechanical protection for concrete, steel, and other prepared surfaces.

Engineered with a unique polymeric novolac resin **MasterShield CHR 360** forms a highly cross-linked chemical structure, significantly enhancing durability and outperforming conventional epoxy coatings. The formulation's low viscosity ensures easy application, excellent surface wetting, and outstanding adhesion to properly prepared substrates.

Areas of Application

MasterShield CHR 360 is designed for high-performance protection in harsh environments, making it suitable for a wide range of applications, including:

- Acid-proofing of floors and walls in industrial and chemical processing facilities
- Secondary containment structures to prevent chemical leakage and contamination
- Wastewater asset protection, including tanks, treatment plants, and pipelines
- Heavy-duty flooring in areas exposed to aggressive chemicals and mechanical wear
- Protective coatings for concrete and steel surfaces, ensuring durability in corrosive environments
- Water industry applications, tested and approved to AS4020:2018 for use in potable water environments

Characteristics and Benefits

- Self-priming with excellent adhesion to concrete and steel
- High abrasion and mechanical resistance
- Outstanding chemical resistance to acids, solvents, fuels, and industrial chemicals
- Approved to AS4020:2018 for use in potable water applications
- Suitable for vertical and horizontal surfaces

- Long-lasting protection in aggressive environments, reducing maintenance needs
- Fast application with high-build capabilities, minimizing downtime
- Strong adhesion ensures reliable performance on properly prepared surfaces.

Properties

Mixing Ratio (A:B)	3: 1 by volume
Yield (per 16L kit)	40m ² @ 2x200 microns dft
Volume Solids Content	100%
Working Time	20 minutes @ 25°C
Recoating Time	8 – 16 hours @ 23°C
Light Foot Traffic	12 – 24 hours @ 25°C
Full chemical Cure	5 days @ 25°C
Abrasion resistant (Taber Abraser Performance)	97 mg loss
VOC	<30 gr/l

Application

For full details on mixing and application, please refer to: "Chemical resistant Novalac coating MasterShield CHR 360" application guidelines.

Preparation

Concrete should be at least 28 days old. Ensure it is free of all contaminants, additives, curing agents, oils, pre-existing coatings etc and is also alkaline in nature. Prepare as necessary by industry approved methods like abrasive blasting etc, as applicable, to expose firmly held aggregate to minimum CSP3 Standard. Vacuum all dust and debris. Allow to dry if wet. Prepare steel surfaces in accordance with the AS 1627 series. Always confirm preparation adequacy.

MasterShield CHR 360

Acid resistant high build novolac coating

Overview

Apply a primer coat (MasterStrength 2525) by roller at nominal DFT.

If substrate presents surface irregularities, such as bugholes, etc or requires repair following surface preparation, proceed with the application of epoxy render repairs (MasterStrength 2525 mixed with MasterCoat FIL 5/10/30 to desired consistency).

Apply three coats of **MasterShield CHR 360** by spray/roller to achieve required nominal DFT.

Chemical Resistance

MasterShield CHR 360 is resistant to a wide range of chemicals. Specific data is available on request.

Typical resistance to spillages includes: (examples only), ammonia solutions, hydrocarbon solvents, sulphuric acid solutions, kerosene, lactic acid solutions, diesel fuel, skydrol, hydrochloric acid solutions, sodium hydroxide, bleach solutions (may discolour), inorganic salt solutions, vegetable oils.

Please refer to the "Chemical Resistant Guide Chart" for more details.

Estimating Data

16L pack theoretical coverage is 95m² per coat at 170 microns dft.

Packaging

MasterShield CHR 360 is available in 16 litre kits:

Part A – 12 litres

Part B – 4 litres

Storage & Shelf Life

Store in cool and dry warehouse conditions. Shelf life in these conditions is 12 months in unopened original bags.

Specification Clause

This Guideline Specification addresses product selection of suitable protective coatings for concrete protection in the WWTP environment.

The overall system comprises of a low viscosity, high strength 2 component solvent free epoxy primer (such as MasterStrength 2525) and three coats of High Build Acid Resistant novolac Coating (such as MasterShield CHR 360) in accordance with tables 5.6 and 8.20 of WSA 201:2020. All products mentioned herein are solvent free so Wet Film Thickness, WFT = Dry Film Thickness, DFT.

The novolac coating provides high level chemical and mechanical protection for concrete, steel, and other prepared surfaces and is AS4020 approved.

Precautions

For the full health and safety hazard information and how to safely handle and use this product, make sure that you obtain a copy of the Safety Data Sheet (SDS) from our office or website.

MasterShield CHR 360

Acid resistant high build novolac coating

Disclaimer

MasterShield-CHR360-ANZ-V2-1125

STATEMENT OF RESPONSIBILITY

The technical information and application advice given in this MB Solutions Australia Pty Ltd 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 and for ensuring that the application and use of the product is in accordance with the manufacturer's guidelines and recommendations.

NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by MB Solutions Australia Pty Ltd either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not MB Solutions Australia Pty Ltd, are responsible for carrying out procedures appropriate to a specific application.

MB Solutions Australia Pty Ltd

ABN 69 634 934 419
Suite 102, 2 Burbank Place
Norwest NSW 2153

Freecall: 1300 227 300

MB Solutions New Zealand Ltd

45C William Pickering Drive
Albany, Auckland
New Zealand

Phone: +64 9 414 7233

Emergency Advice:

1300 954 583 within Australia (24hr)
0800 001 607 within New Zealand