

Clear or pigmented epoxy floor coating system

Description

A high quality epoxy floor coating system that is solvent free when used as a clear un-pigmented coating or binder.

Uses

- A heavy duty clear or pigmented coating for concrete and polished concrete floors. Highly resistant to chemical attack and pedestrian or vehicular traffic.
- Can be used in conjunction with graded aggregates to produce durable decorative floor finishes.
- FOR INTERIOR USE ONLY.

Advantages

- Long lasting and easily maintained with good resistance to a wide range of domestic and commercial chemicals.
- Solvent free when used as a clear un-pigmented coating or binder.
- Outstanding water resistance.
- Resistant to most chemicals.

Properties

Viscosity @ 25°C	Low (<1,000 cps)
Gel Time (@ 20°C, 65% R.H.)	25-35 minutes
Dust Free Time @ 20°C, 65% R.H.)	8 hours
Cure Time (@ 20°C, 65% R.H.)	Approx. 10-12 hours

Chemical properties

Resistant to a wide range of chemicals. Resistance to spillages (examples only).

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|-------------------------|---------------------------|
| • Toluene | • Sulphuric Acid 30% |
| • Acetic Acid 5% | • Skydrol |
| • Sodium Hydroxide 30% | • Sodium Chloride |
| • Ammonia 20% | • Kerosene |
| • Used sump oil | • Petrol |
| • Hydrochloric Acid | • Lactic Acid 5% |
| • C41 (Kodak) chemistry | • Ajax Liquid Gel (clear) |
| • Vegetable oils | |

Surface staining may result from exposure to some aggressive chemicals.

Good housekeeping practice requires spills to be quickly removed and washed.

Limitations

- Discolours after prolonged exposure to UV sunlight.
- Suitable for INDOOR USE ONLY.
- Prone to scratching. To reduce this, add SRA Slip Reducing Additive or over-coat with Lustre Seal Polyurethane M20 or Mastershield UA20.
- Not recommended for use below 10°C or above 35°C.
- Ensure surface to be coated is dry. Moisture can cause blooming and delamination.
- Short pot life, approximately 25 minutes.

Application

NOTE: for Flake Flooring application instructions, see Mastershield Polymer Flake System TDS.

Preparation

Ensure surface to be coated is free of all dirt, grease, oil, paint, curing agents and other contaminants.

- If the floor is smooth, grinding is advised. This will maximise adhesion.
- If curing agent has been applied, grinding is necessary.
- Acid treatment is a secondary option. Acid etch with hydrochloric acid. Dilute approx 20 parts water to 1 part acid (depending on porosity) to remove any loosely bound cement and laitance.
NOTE: smooth concrete will require a higher acid content. Maximum strength - 10 parts water to 1 part acid. Pressure clean immediately to clean and remove all remnants of acid (do not allow acid to dry on surface). Pressure clean at minimum 2000 psi (large open areas, example factories and warehouses, required for this preparation). Allow to completely dry, refer to Dry Test.

Dry Test

- Place a piece of plastic over a small area, tape the edges and leave for 1 hour.
- Remove plastic, if there is no moisture on either surface, concrete is sufficiently dry.

Mixing

- Mix Mastershield M90 Part A and Mastershield M90 Part B in correct proportions in a clean, dry 20L bucket. Mix thoroughly for a minimum 3 minutes with mechanical mixer at low speed.
- If colour required, add Lustre Seal 1L Coloured Sealer Tint per 10 litre kit and mix again.
- Transfer contents into separate clean bucket. Ensure no unmixed product remains in the first bucket. Mix again.

Note: First coat can be diluted up to 20% with Lustre Seal Solvent to achieve better adhesion to the concrete surface.

Mastershield® M90

Application

- Apply to surface with a low nap roller. Roller tray required for roller application.
- Ensure coats are applied evenly.
- Allow approximately 10-12 hours between coats, depending on conditions.
- Second coat to be applied undiluted.
- Allow to cure (10-12 hours depending on conditions).

To obtain a lower slip factor it is advisable to use the appropriate slip resistant additive with the sealer for better grip under adverse conditions.

CAUTION: After mixing Part A & Part B **DO NOT** re-lid mixed parts, resulting in an exothermic reaction.

Special decorative finishes - training course

Application of special decorative finishes, including:

- Design trowel down,
- Two tone,
- Marble
- Metallic,

Please contact your local Parchem store or visit our website for training course information.

Optional hard wearing top coats using Lustre Seal M20 or Mastershield UA20

Mastershield M90 is prone to scratching. Top coat recommended for trafficable areas.

- Ensure completely cured before overcoating with Lustre Seal Polyurethane M20 or Mastershield UA20 as the solvents may reactivate the surface. See relevant TDS for application instructions.

Supply

10 litre kit		
Part A	6.0 L	PC:MS90A
Part B	4.0 L	PC:MS90B

Usage Rate

Approximately 1 litre per 10 square metres, depending on surface.

Storage Conditions

Store in cool, dry area in unopened container. Highly flammable liquid, store appropriately. Refer to SDS.

Shelf Life

Mastershield M90 will have a shelf life of three (3) years if stored in a dry location between 5 - 35°C in its original unopened packaging.

Pot Life

Approximately 25 minutes @ 25°C. If product is warm, pot life time will be shortened.

Cleaning

Clean up with Lustre Seal Solvent.

Safety

Recommended PPE:

- Organic vapour respirator mask
- Solvent resistant gloves
- Safety eye wear
- Appropriate foot wear

Refer to Mastershield M90 Part A and Part B Material Safety Data Sheet (MSDS) for detailed information.

Important notice

A Safety Data Sheet (SDS) and Technical Data Sheet (TDS) are available from the Parchem website or upon request from the nearest Parchem sales office. Read the SDS and TDS carefully prior to use as application or performance data may change from time to time. In emergency, contact any Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

Product disclaimer

This Technical Data Sheet (TDS) summarises our best knowledge of the product, including how to use and apply the product based on the information available at the time. You should read this TDS carefully and consider the information in the context of how the product will be used, including in conjunction with any other product and the type of surfaces to, and the manner in which, the product will be applied. Our responsibility for products sold is subject to our standard terms and conditions of sale. Parchem does not accept any liability either directly or indirectly for any losses suffered in connection with the use or application of the product whether or not in accordance with any advice, specification, recommendation or information given by it.

