

Cemcryl

PRODUCT DATA SHEET

BORAL

Boral Cements Blue Circle® Cemcryl is a water based acrylic emulsion copolymer designed as a bonding agent and an admixture for cement based mixes including mortars and renders.

Cemcryl improves the bond and strength of mixes. It also enhances its water impermeability, flexibility and greater resistance to cracking. Being an acrylic, **Cemcryl** offers superior performance to PVA modified systems and unlike PVA's will not readily breakdown under wet conditions.

DIRECTIONS FOR USE

Surface Preparation: Ensure all surfaces are free from oil, grease, dust, release agents, sealants, adhesives, paint or other substances that may interfere with the bond or penetration of **Cemcryl**. Pre-wet highly porous surfaces as required.

NOTES ON MIXING

Shake well prior to each use. Allow a minute for excess bubbles to disperse.

Using Fillers – sand, cement and aggregates must be mixed in a separate container. Add mixed materials to **Cemcryl** solution slowly and mix on low speed only when using a shear mixer (e.g. drill & paddle). High speed shear mixing entrains too much air and will reduce the mortars overall performance.

CLEAN UP

Use water to clean up any uncured material from equipment or surface areas.

FEATURES

- Ideal for bonding new render/concrete to old.
- Improved abrasion and impact resistance.
- Resistance to mild acids, oils, fats and grease on floors.
- Improved compressive and flexural strength in cement mixes.
- Improved durability.

SUGGESTED USES

As a structural bonding agent:

- New to old concrete/mortar.
- Priming walls for top coating. E.g. scratch coats on smooth concrete walls.

As an additive to cement based products:

- Repair mortars, tile bedding mortars.
- Low permeability renders for concrete pools, tanks or ponds.
- Repairs to both horizontal and vertical concrete surfaces.

As a sealing solution:

Sealing concrete, fibre cement sheeting, unglazed pots.

Repair Mortars – Diluted **Cemcryl** may be used as a mixing liquid in place of water in all cement based mixes. Other admixtures should not be included unless trials indicate satisfactory performance.



COVERAGE

- Dependant on application. As a guide when using **Cemcryl** diluted 1:1 with water (1 litre of **Cemcryl** mixed with 1 litre of water), coverage will be approximately 12 – 16 m² when used as a surface sealer. Refer to Application Table for other ratios.

NOT RECOMMENDED FOR

Cemcryl is not to be used for waterproofing, or areas that are permanently water immersed.

DO NOT APPLY

- (a) On days of extreme weather conditions when the temperature drops below 5°C or above 35°C. Hot dry windy days should be avoided at all times.
- (b) To highly porous surfaces without pre-wetting. Otherwise, severe cracking and delamination may occur due to the rapid moisture loss from the mortar (e.g. masonry block walls can be highly porous and must be hosed down, without saturating, prior to applying cement based mixes.

CURING

Repair Mortars using **Cemcryl** should not be water cured. Excessive use of water can wash out acrylic emulsions and weaken the surface. If curing is required, the surface should be sprayed with **Cemcryl** diluted with 1 to 2 parts of clean potable water.

AVAILABILITY

Cemcryl is available in 4 and 15 litre containers.

CLEAN UP AND STORAGE

Clean all tools and equipment with soapy water promptly after use. Store **Cemcryl** in a cool place and ensure containers are satisfactorily sealed. Always shake well prior to use.

SHELF LIFE

Store up to 12 months unopened.

CONTENTS

Contains 100% acrylic copolymer in water. White milky liquid in appearance.

RISK

Non hazardous materials in accordance with NOHSC.

SAFETY DIRECTIONS

Use in a well ventilated area. Wear appropriate protective equipment to prevent inhalation, skin and eye contact. Avoid generating mist. Use in designated areas with adequate ventilation.

SPILLS/LEAKS

Restrict access to area. Wear appropriate personal protective equipment and clothing to minimise exposure. If possible contain the spill. Place inert absorbent material onto spillage. Do not dilute material but contain.

FIRST AID

If swallowed **DO NOT** induce vomiting. Wash out mouth with water. Seek medical attention.

In case of contact with eye(s), wash with copious amounts of water holding eyelid(s) open. Take care not to rinse contaminated water into the non-affected eye. If symptoms persist seek medical attention.

In case of contact with skin or hair, remove contaminated clothing and flush skin and hair with soap and running water. Wash contaminated clothing before re-use. If irritation occurs seek medical advice.

If inhaled, remove from contaminated area. Apply artificial respiration if not breathing. If symptoms develop seek medical advice.

For further safety information consult the **Material Safety Data Sheet** for the product.

DISPOSAL

Dispose of waste material according to Federal Environmental Protection Authority, or your local Waste Management Authority.

FIRE

Fire Fighters should wear full protective clothing and self-contained breathing apparatus. Use water spray or fog, foam, carbon dioxide or dry chemical.

Job Application Table – To be used as a guide only. Ratios may change depending on the type of sands used and their moisture contents.

Job Application	Ratio Cemcryl to water	Fillers	Detail of application
1. Bonding additive for cement based mortars & concretes. Tile adhesive.			
	1:4	Nil	Add 1 part Cemcryl to 4 parts clean water. Mix together and add directly as a gauging solution to your mortar/concrete or tiling mix. Mix normally and apply.
2. Bonding cement render/plaster to smooth surfaces (bricks/concrete)			
	1:1	Nil	Add 1 part Cemcryl to 1 part clean water to make a 50/50 bond coat. Brush, roll or spray on the coating liberally. (more porous surfaces may require two coats). Very hard, smooth surfaces may require two parts water to 1 part Cemcryl for the first coat and then 50/50 bond coat for the second. See 3(b) for Dash coats as second coat.
3. Bonding new render/concrete to old or existing surface			
(a) Slurry coat	1 part neat Cemcryl	1 part cement 1 part sand (optional)	Brush, roll or spray onto surface. Apply floor screed or topping while wet or tacky.
(b) Floor screed	1:2	1 part cement 3 parts sand	While Slurry coat is still tacky spread the floor screed. Work into the surface to ensure a good mechanical bond or key.
(c) Dash/scratch coat Smooth surfaces, concrete pools	1:2	1 part cement 2 parts sand	In place of second coat above in 2. Mix to heavy paste and dash on floor/wall to leave a very rough surface. Scratching tool may be used. Allow to dry over night prior to applying the finishing coat or render or pebblecrete mix.
4. Re-topping worn and damaged floors			
up to 6mm	1:2	3:1 S/C	Seal floor as in (2) or (3a). Mix 3 parts clean sand per 1 part cement, add liquid.
6 to 12mm	1:2.5	2:1:1 A/S/C	2 parts fine aggregate (3-5mm), 1 part sand, 1 part cement.
12 – 25mm	1:3		As per 6-12mm. Can use slightly coarser aggregate.
>25mm	1:4		Can use slightly coarser aggregate.
>50mm	1:6		Specially graded concrete only. At least 10/7mm aggregate size. Cemcryl dilution increased (more diluted) as aggregate size is increased.
5. Repairs to concrete			
(a) Hair cracks	1:3	Neat cement	Mix to paste. Brush or rub into cracks.
(b) Larger cracks	1:2	1 part cement 3 parts sand	Seal surface as in (2) or (3a). Trowel into cracks.
(c) Holes – chips			See (4) above – treat as for topping floors. If holes less than 6mm deep. Use Cemcryl with equal parts water. Size is increased.
6. Sealing			
(a) Porous substrates	1:1		As for (1). For porous sand/cement pots, masonry blocks etc apply Cemcryl neat onto surface and allow to dry fully prior to planting to help retain moisture.
(b) Denser substrates	1:2		For denser pots or planter boxes, dilute Cemcryl further and apply in two coats.

The information in this Data Sheet and any advice given should be viewed as a guide only. Boral makes no guarantee of the accuracy or completeness of the information and recommends you conduct your own testing to determine suitability for your specific purpose.

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