GEMREZ CR 1 -1

TDSG4155

DESCRIPTION	Gemrez CR 1:1 is a two-part, solvent free, chemical resistant epoxy resin that can be applied over damp surfaces, and can cure below 0°C. It is formulated for use as a chemical resistant primer under other Cotec chemical and abrasion resistant coatings and toppings. It can be reinforced with binder free fibreglass and other fibres. Resistant to most concentrated acids, alkalis and many common chemicals – consult with Cotec Technical.
TYPICAL USES	Used for coating concrete, steel, and fibreglass, and bunds and similar areas exposed to chemical splash and spillage.
PERFORMANCE	4.155 Gemrez CR 1:1 is suitable for its intended use, when mixed and applied according to specification to a properly prepared substrate.
LIMITATIONS	This does not cover physical abuse or impact damage to the system, damage caused by movement of the substrate, faulty substrate, substrate contamination, failure to regularly maintain the system, or normal wear and tear. To ensure maximum life of 4.155 Gemrez CR 1:1 chemical deposit must be washed off within 1 hour.
TECHNICAL DATA	Resin: 2 Componenet Epoxy Solvent: Acetone Appearance: Resin –pigmented liquid, Hardener - amber liquid, Aggregate quartz filler Durability: Excellent Potlife: 30 mins @20°C Pack Size: 1,2,4 Cure Hard @20°C: 24 hours Mixing Ratio: 1:1 Vol Solids: 100 percent Touch Dry: Overnight @20°C Recoat Time: 24 Hours @20°C RH 50% Number of Coats: 2 to 3 Theoretical Coverage: 5 m²/litre/coat Wet Film Thickness: 200 microns Dry Film Thickness: 200 microns
SPREAD RATE	First Coat: 5 - m²/litre/coat Practical spreading rates will vary depending on such factors as application method, ambient conditions and surface porosity and roughness.
PRODUCT CODES	G4155

SURFACE PREPARATION

Cementitious Flooring-New Unpainted

It is strongly recommended that plaster and concrete is left to age for at least 28 days before coating to allow the concrete to fully cure before application. It is recommended that a moisture test on the concrete is carried out at this stage prior to painting. Refer to PS-C004 The Moisture Content of Concrete.

Note: Surfaces treated with Xypex
Do not proceed with surface preparation or application or other coatings until waterproofing treatment has cured and set for a minimum of 21 days. Light abrasive blasting or washing the Xypex surface with a 3 - 5% acid solution followed by a rigorous rinse with clean water is recommended before applying the coating. Be sure to flush all acid off the surface. Alternately, removal of the Xypex coating by high pressure washing or abrasive blasting following full curing is acceptable.

All surfaces must be clean, and free from dirt, grease, and any other surface contaminant. Clean with TRUEPREP SURFACE CLEANER following instructions, power wash (min 3500 psi) to remove residue and any loose material. Refer PS-C006 Making Concrete Clean and Dry.

All surfaces need to be inspected once degreased and power washed to fully establish the condition of existing substrate (and remaining coating) prior to finally specifying the degree and type of preparation work. Any recommendations made prior to this are guides only.

The substrate needs to be profiled to an open uniform surface suitable for priming, and consideration given as to the most appropriate method of preparation that maintains the substrates integrity.

The method of preparation work (Grinding, media/soda blast, or UHP blasting, acid etching, sanding or other) must be discussed and documented separately. Generally, a full grind to remove existing contamination and profile the surface as above is recommended.

Repair work (surface and crack repair, expansion joints, rebar rust leaching) must be discussed and documented separately. Do not expect paint to successfully bridge gaps and cracks. Refer to PS-C005 Repair of Concrete Defects.

Cementitious-Aged Unpainted Poor

Moss and Algae: Any algae growth on surfaces must be killed off. The pool will need to be emptied and then treated with TRUEPREP GREEN-KILL following the manufacturer's instructions. This could take multiple applications. Failure to do this and completely kill the roots of the algae that will have grown into the substrate could lead to paint failure and re growth in those areas.

All surfaces must be clean, and free from dirt, grease, and any other surface contaminant. Clean with TRUEPREP SURFACE CLEANER following instructions, power wash (min 3500 psi) to remove residue and any loose material. Refer PS-C006 Making Concrete Clean and Dry.

It is recommended that a moisture test on the concrete is carried out at this stage prior to painting to confirm the moisture content of the surface is dry enough to proceed. Refer to PS-C004 The Moisture Content of Concrete.

All surfaces need to be inspected once degreased and power washed to fully establish the condition of existing substrate prior to finally specifying the degree and type of preparation work. Any recommendations made prior to this are guides only.
Any adhesive or glue residues must be completely removed.

The substrate needs to be profiled to an open uniform surface suitable for priming, and consideration given as to the most appropriate method of preparation that maintains the substrates integrity. The method of preparation work (Grinding, media/soda blast, or UHP blasting, acid etching, sanding or other) must be discussed and documented separately. Generally, a full grind to remove existing contamination and profile the surface as above is recommended.

Repair work (surface and crack repair, expansion joints, holes, rebar rust leaching) must be discussed and documented separately. Do not expect paint to successfully bridge gaps and cracks. Refer to PS-C005 Repair of Concrete Defects.

COATING TECHNOLOGIES LIMITED
10 Andromeda Crescent, East Tamaki, Auckland 2013 Ph +64 9 837 0897 www.cotec.co.nz

Cementitious-New Unpainted
It is strongly recommended that plaster and concrete is left to age for at least 28 days before coating to allow the concrete to fully cure before application. It is recommended that a moisture test on the concrete is carried out at this stage prior to painting. Refer to PS-C004 The Moisture Content of Concrete.

Note: Surfaces treated with Xypex
Do not proceed with surface preparation or application or other coatings until waterproofing treatment has cured and set for a minimum of 21 days. Light abrasive blasting or washing the Xypex surface with a 3 - 5% acid solution followed by a rigorous rinse with clean water is recommended before applying the coating. Be sure to flush all acid off the surface. Alternately, removal of the Xypex coating by high pressure washing or abrasive blasting following full curing is acceptable.

All surfaces must be clean, and free from dirt, grease, and any other surface contaminant. Clean with TRUEPREP SURFACE CLEANER following instructions, power wash (min 3500 psi) to remove residue and any loose material. Refer PS-C006 Making Concrete Clean and Dry.

All surfaces need to be inspected once degreased and power washed to fully establish the condition of existing substrate (and remaining coating) prior to finally specifying the degree and type of preparation work. Any recommendations made prior to this are guides only.

The substrate needs to be profiled to an open uniform surface suitable for priming, and consideration given as to the most appropriate method of preparation that maintains the substrates integrity.

The method of preparation work (Grinding, media/soda blast, or UHP blasting, acid etching, sanding or other) must be discussed and documented separately. Generally, a full grind to remove existing contamination and profile the surface as above is recommended.

Repair work (surface and crack repair, expansion joints, rebar rust leaching) must be discussed and documented separately. Do not expect paint to successfully bridge gaps and cracks. Refer to PS-C005 Repair of Concrete Defects.

MIXING INSTRUCTIONS

Add 1 part hardener to 1 part base by volume and thoroughly mix for at least 1 minute. A drill with a mixing blade is required.
• Mixing 1 litre of part A and 1 litre of part B is a good mix size.
• In cold weather warming base & hardener to 25°C will make mixing easier

APPLICATION

Concrete
Must have cured a minimum of 28 days. Grind, abrasive sweep blast, or scabble to give clean, sound substrate with a good key.

Steel
Blast with a suitable abrasive to near white metal (SSPC 10/SA 2.5 standard). If this is not possible remove loose material by mechanical cleaning or high-pressure water blast until only light rust is left.

Fibreglass
Abrade surface to give a good key and leave a clean, sound substrate with a good key.

Other surfaces – consult Cotec

Apply by good quality brush, and short nap roller.

PRECAUTIONS
System typically cures to walk on within 24 hours - if possible, cure for a further 16 hours @ 50° C. Allow 7 days minimum before putting into service.

CLEAN UP
Acetone

COATING TECHNOLOGIES LIMITED
10 Andromeda Crescent, East Tamaki, Auckland 2013 Ph +64 9 837 0897 www.cotec.co.nz

APPLICATION NOTES	• Do not overbuild on vertical surfaces or product may run. • It is better to apply in thin coats and apply extra coats to achieve correct film thickness and coverage. For example, apply 4 thin coats on a vertical surface instead of 2 full coats
ENVIRONMENTAL	This formulation uses the latest technology with low toxicity, ensuring environmental issues are not compromised. DO NOT POUR paint or wash down storm water or water courses. ALWAYS dispose of in accordance with local Government regulations. Soak up spills with absorbent material and dispose of properly. If spraying use suitable respiratory protection. Refer to the MATERIAL SAFETY DATA SHEET

COATING TECHNOLOGIES LIMITED
10 Andromeda Crescent, East Tamaki, Auckland 2013 Ph +64 9 837 0897 www.cotec.co.nz