



Chem Coats (Pvt) Ltd.

ChemRep 60 & 180

Quick-setting cement-based water-stopping powders

DESCRIPTION

ChemRep 60 & 180 is a one- component, cementitious blend which sets rapidly after addition of a minimal amount of clean water. They are fast setting mortars, which are easy to apply for the purpose of curtailing water seepages and similar difficult to apply situations.

USES & Advantages

ChemRep 60 & 180 is used to stop water flow through porous substrates and to provide a rapid temporary patch in concrete, brick and porous substrates, such as underground basements, lift shafts, tunnels, sewage manholes, pipes and mining installations. The mortar can be applied on horizontal, vertical and overhead surfaces. Ready to use powder blend - only the addition of clean water is required. Fast setting patch repair resolving seepage problems quickly. Contains no chlorides. Excellent bonding to most porous substrates. Stopping negative pressure water migration in emergencies.

SURFACE PREPARATION

The substrate must be sound, firm, clean and free of oil, grease, loose particles, cement laitance, old layers of paint or other contaminants. In severe cases chemical or steam degreasing and high-pressure water blasting might be required. Assess the initial adhesion or the effectiveness of the degreasing by means of pull-off tests. Square cut all edges to be repaired a minimum of 15 mm deep, perpendicular to the surface, followed by the removal of all unsound material to a minimum depth of 15 mm. When using compressed air for cleaning, the air must be clean and oil free. Never feather edge the product. To seal leaks, crack openings must be chased out to approx. 20mm square. The chase should always be undercut to avoid leaving a v-section. All loose material and debris should be removed.

MIXING

ChemRep 60 and 180 are generally mixed in small quantities for specific repairs. For this reason it is more practical to mix these products by volume as per the ratio:

1 part water to 3 parts **ChemRep 60 Or 180**

The water must be clean and of a potable quality. The product must be mixed to a thick putty-consistency very quickly and only a quantity which can be used immediately.

APPLICATION

Work the mixed mortar into place using a gloved hand or trowel, exerting sufficient pressure to ensure complete wetting of substrate and required compaction before material can set. To plug running water, dry ChemRep 60 and 180 powders can be used directly onto the running water, but must be held in place until an initial set has taken place.

ChemRep 60 or 180 can be applied to horizontal, vertical or overhead surfaces at a wide range of thicknesses in excess of 15 mm. Generally, the volume of mixed material used in a single application is restricted to that which can be applied by trowel or gloved hand. The mortar can be built up to provide thicker sections.



PROPERTIES

Initial set time	(min @ 20° C)
ChemRep 60	Approximately 1
ChemRep 180	Approximately 3
Note: set times will be extended when mixed at lower temperatures.	
Compressive strength (28 days@ 20° C)	
ChemRep 60	23 Mpa
ChemRep 180	39 Mpa

These products display heat generation characteristics in thick applications and, although they have been formulated to minimize the effect, high heat output (exothermic) could lead to severe shrinkage and consequent cracking.

YIELD

ChemRep 60 12.5 liters per 25 kg

ChemRep 180 12.5 liters per 25 kg

PACKAGING

ChemRep 60 and ChemRep 180 are normally supplied in 5kg, 25Kg polythene lined paper bags.

CLEANING

ChemRep 60 and 180 products should be removed from tools, equipment and mixers with clean water prior to the initial set. Cured material can only be removed mechanically.

HANDLING & STORAGE

These products have a shelf life of 6 months if kept in a dry cool place in the original packaging. In more extreme conditions this period might be shortened.



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TEMPERATURE

Surface and ambient temperature must be at least +5° C and rising, ideally between 20° C and 30° C. In colder conditions warmed water may be used to improve the setting times. At ambient temperatures above 35° C, the material should be stored in the shade and cooled water used for mixing.

HEALTH & SAFETY

ChemRep 60 and 180 are alkaline and should not be allowed contact with skin and eyes. Avoid inhalation of dust during mixing by wearing dust masks. The use of gloves, eye protection and dust masks is advised. Immediately wash with water in the event of contact with skin. Splashes into eyes should also be washed immediately with plenty of clean water and medical advice sought thereafter. If swallowed, seek medical attention immediately - do not induce vomiting.

IMPORTANT NOTE

The information given in this data sheet is based on current development work and many years of field experience. Whilst every effort is made to ensure that the information is reliable, we cannot accept responsibility for any work carried out with our materials as we have no controls over methods of applications, site conditions etc. In view of the continuing research and development being undertaken in our laboratories we advise customers in their own interest to ensure that this data sheet has not been superseded by a more up-to-date publication. All products are sold subject to our standard conditions of sale which are available on request. Field services, where provided, does not constitute supervisory responsibility. For additional information, please contact your local Chem Coats representative.

RANGE OF PRODUCTS

WATERPROOFING SYSTEMS
INDUSTRIAL FLOOR SURFACES
PROTECTIVE COATINGS

PREPACKED REPAIR MORTARS
CEMENTITIOUS & EPOXY GROUTS
CONCRETE ADMIXTURES

SEALANTS
CRACK INJECTION
CONCRETE ADHESIVE