GENCON CHEMICALS

GENPRUF RMC INTEGRAL WATERPROOFER

INTRODUCTION:

A liquid admixture produces specifically for the complete and permanent waterproofing of reinforced and mass concrete (RMC) structures, ready mixed and precast concrete

PRIMARY USES:

GENPRUF RMC should be used in all structural concrete that is constantly or intermttently in contact with water such as sea walls, tunnels, basements, underground water tanks, structural and pre-cast concrete, exposed super structures.

FUNCTION:

It has the following advantageous effects:

- 1. At the mixing stage, it improves the wetting action of the gauging water making the mix more plastic, or allowing a reduction to be made in water content.
- 2. It increases the compressive strength of concrete when use is made of water reducing properties.
- 3. Concrete of increased workability and the same strength can be produced without altering the mix design.
- 4. It improves the bulk density of concrete.
- 5. When used for cement rendering, it improves bond strength and, when hardened, produces an impervious, non-absorbent surface.
- 6. WRC approved to be used for potable water tanks and water retaining structures.

ACTION IN USE:

GENPRUF RMC has both a chemical and physical reaction in the mix: firstly, it creates insoluble crystals in the hardened concrete which make it permanently waterproof. Secondly, by breaking down the surface tension of the gauging water, it enables a water reduction to be made, or workability to be increased.

GENPRUF RMC Integral Waterproofer in no way affects the setting times of the concrete and it will not affect steel re-inforcement.

DIRECTION FOR USE:

GENPRUF RMC should be added with mixing water preferable via a dispenser. It should never be added to the dry cement. No extension to mixing times are required.

To Make Waterproof Concrete:

Ensure specific water cement ratio is not exceeded, work within the range of 0.4 to 0.6. Keep water content as low as possible compatible with achieving full compaction. Place concrete quickly and ensure it is thoroughly compacted.

Protect new concrete against rapid drying out and ensure adequate and complete curing using Concrete Curing Compound.

DOSAGE:

200 - 300 ml/50 kg bag of OPC. Field trials should be conducted to determine the effect of GENPRUF RMC on workability of the concrete.

Manufactured in:

Saudi Arabia



(2)

Effects of Over-Dosage:

Slight set retardation. (No effect on striking times.) Slight increase in air content. Increase in workability.

As the workability of the concrete will be significantly improved and advantage is taken of this to produce concrete within the specified slump, it is envisaged that there will be no long term effect on strength.

COMPOSITION:

A stabilized emulsion of ester plus highly refined Napthalene Sulphonate Polymers.

SPECIAL FEATURES:

Advantage of GENPRUF RMC strong plasticising action must be taken to reduce water contents to a minimum. A reduction in W/C ratio in the region of 10 to 15 % can generally be achieved.

COMPATIBILITY:

GENPRUF RMC is compatible with all types of Ordinary Portland Cement (OPC) including Sulphate Resistant Portland Cement (SRPC)

COMPATIBILITY:

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Reference	Initial Surface Absorption ml/m2/sec				Reference	Initial Surface Absorption ml/m2/sec using GENPRUF RMC			
Control	10 min	30 min	1 hour	2 hour	Control	10 min	30 min	1 hour	2 hour
1.	2.08	1.17	0.98	0.81	1.	0.89	0.46	0.36	0.22
2.	2.68	1.66	1.49	1.28	2.	0.94	0.58	0.43	0.29
3.	2.45	1.68	1.41	1.23	3.	0.82	0.37	0.32	0.24
Average	2.40	1.50	1.29	1.10	Average	0.88	0.47	0.36	0.25

GENPRUF RMC is effective as a permeability reducing admixture both under condition of pressure and capillary absorption. That it can be used with complete safety with OPC and SRPC cements. It significantly lowers water cement ratio whilst maintaining workability without effecting compressive strengths.

All products should be used in accordance with the manufacturers instructions. No responsibility can be taken by the manufacturer where conditions of use are beyond our control.

STORAGE:

Excellent shelf life 2 Years. Protect from frost.

PACKAGING:

210 litre drum.

HEALTH & SAFETY:

GENPRUF RMC is harmless to the skin and non-toxic. Avoid contact with the eyes. As a general Code of Safety Practice, all chemical products should be treated with care and kept away from children and animals.

While the information and/or specifications given under to the best of our knowledge true and accurate, no warranty is given or implied in connection with any recommendaions suggestions by us, our representatives, agent. or distributors as as the conditions of use and any labour involved are beyond our control.