

Ultra™ series

ULTRA POOL CONCRETE



PERFORMANCE
QUALITY
INNOVATION

DESCRIPTION

A strong and workable concrete mix designed using a smaller stone, making the mix cohesive and user-friendly for hand packing the sides of a pool.

WHAT TO KNOW ABOUT POOLS

It is a requirement of SABS 0209-1986 (the design and construction of private swimming pools) that the structural design of every pool be carried out by a competent person or a professional engineer. Pools designed otherwise must be certified by the local authority as meeting the relevant design requirements. No variation may be made to the structural design (after it has been approved) without the written permission of the competent person or local authority.

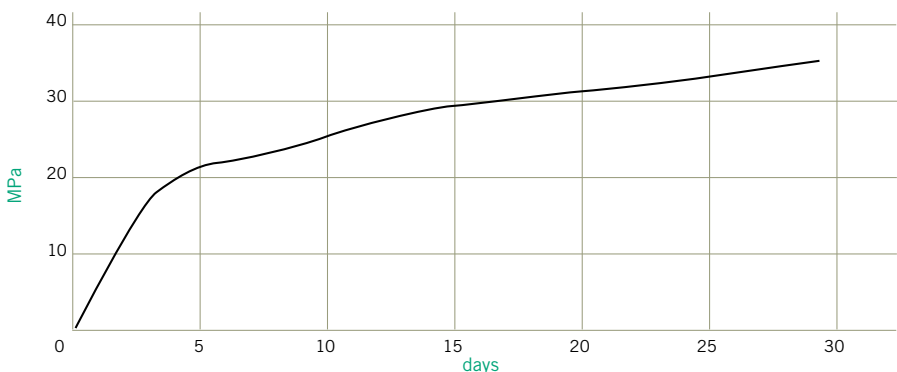
TECHNICAL INFORMATION OF THE MIX DESIGN

Lafarge Ultra Pool Concrete is the designed solution for easy use and technical excellence. The mix has been designed with a low water/cement ratio to ensure maximum durability and Impermeability (watertightness). The mix has a high fines content to ensure a workable and easy to use mix. The finishing process is also assisted by allowing the marbelite to adhere evenly to the concrete. The use of slagment in this mix is limited as it may cause some degree of discolouration of the marbelite. The high fines content also ensures stickiness and cohesiveness in the mix, making packing of sidewalls easy and effective.

STRENGTH GAIN

Ultra Pool Concrete ensures early strength gain. Up to 70% of the 30MPa characteristic strength is achieved within seven days, giving a time saving in the construction programme. The slump of this mix targets 45mm to assist in the packing process. The mix also contains a water reducer to make the mix more workable and dense and to assist in the compaction process. The lower water content also reduces the drying shrinkage of the concrete.

Strength Gain Curve for Pool Concrete



USING LAFARGE'S ULTRA POOL CONCRETE

- First calculate the volume of concrete required to build the pool. After the required volume is calculated, Order Lafarge's Ultra Pool Concrete by telephoning your local Lafarge Orders Department.
- Request that delivery is made as early as possible in the morning to allow enough time to use all the concrete during the daytime and before it starts setting
- If the mix starts drying out, no water should be added to make it more workable as this will decrease the final strength of the concrete.
- It is important to pack the whole shell in one operation to avoid cold joints in the pool shell structure
- Where a joint is unavoidable, the use of a water-stop is recommended.

CURING (Keeping the concrete wet)

Curing plays a critical role after concrete has been placed as it increases the strength of the concrete and helps to prevent cracking. When the concrete is still in a plastic state, rapid loss of moisture should be avoided by protecting it from elements such as wind and sun. Curing must continue for at least seven successive days by using mist sprayers or covering with impervious sheeting. Where access to a building site is restricted, the use of a conveyor belt is recommended.

TECHNICAL DATA

Compressive Strength: 30MPa
Slump range: 15-60mm
Density: +/- 2400kg/m³

Composition

Course aggregate: 13mm crushed stones
Fine aggregate: Crusher sand and natural sand blend
Cement: OPC (dependent on area)
Extender: Fly Ash or slag (dependent on area)
Admixture: Water Reducer

SAFETY PRECAUTIONS

The use of safety goggles and gloves is recommended when placing concrete.



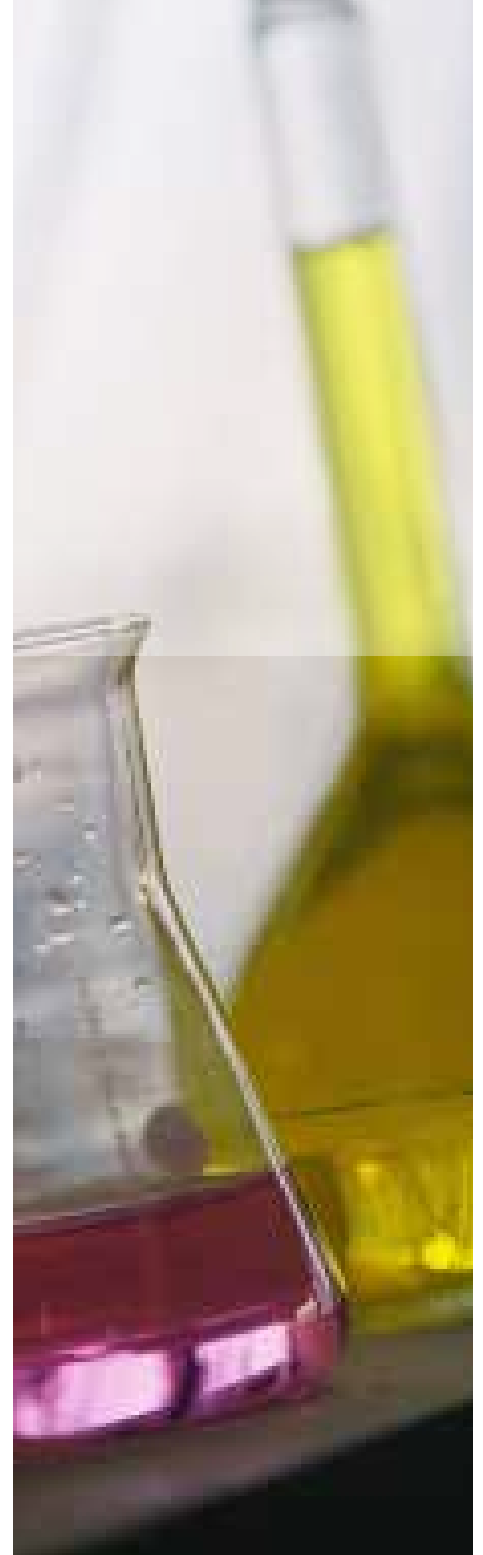
FIRST AID

EYES: Immediately flush eyes, including under lids, with water for at least 15 minutes to remove all particles. If necessary, seek medical advice.

SKIN: Wash skin with cold water and a pH neutral soap as soon as possible, except where open wounds are visible. Attention should be paid to wounds and fresh scars which should be covered with protective paraffin gauze. Seek medical help in cases of prolonged contact with wet concrete.

INGESTION: Rinse mouth with clean water. If swallowing has occurred drink plenty of milk or water. Do not induce vomiting. Seek medical attention immediately.

INHALATION: Remove to fresh air. If symptoms persist seek medical attention.



SALES AND ORDERS

HEAD OFFICE **EASTERN REGION**
Tel: (011) 657 0000 Tel: (031) 275 7400

NORTHERN REGION **SOUTHERN REGION**
Tel: (011) 657 2222 Tel: (021) 508 8000

Lafarge South Africa
35 Westfield Road
Longmeadow Business Estate Ext 11, Edenvale, 1609
Tel: 0860 LAFARG / 0860 523 274
or 0861 LAFARG / 0861 523 274
Main fax: 086 631 0006

www.lafarge.co.za

