

MasterSet AC 102

Accelerating and high early strength admixture

Material Description

MasterSet AC 102 is a ready-to-use liquid admixture formulated to accelerate the setting time of concrete under any conditions and to produce high-early strength in special application concrete.

Areas of Application

MasterSet AC 102 is recommended for concrete requiring faster setting times and strength (compressive and flexural) gain in any temperature conditions. MasterSet AC 102 is ideally suited for highway repair applications and cold weather slab work where chlorides are not restricted.

Note: MasterSet AC 102 does contain added calcium chloride. Should restrictions on chloride contents apply, contact your local Technical Sales Representative to determine the levels of chlorides present for particular dose rates of MasterSet AC 102.

Characteristics & Benefits

Concrete with MasterSet AC 102 admixture has a significantly faster setting time than plain concrete. Increasing the dosage rate increases set acceleration.

Both the compressive and the flexural strengths of concrete with MasterSet AC 102 develop more rapidly than with plain concrete. MasterSet AC 102 can be used to achieve 28 day strength results in as little as 3 days.

Benefits to concrete construction and to the manufacture of concrete products because of this earlier setting and strength gain include:

- earlier finishing of slabwork
- more efficient scheduling, generally faster construction and earlier occupancy
- earlier stripping and reuse of forms
- earlier use of concrete structure

Application

MasterSet AC 102 can be used with air-entraining admixture and other Master Builders Solutions admixtures to achieve cost-effective customised concrete performance. However, admixtures should be added separately to initial batching water to ensure complete distribution throughout the mix.

MasterSet AC 102 should not be used in conjunction with other admixtures supplied by other manufacturers unless specific test information is available.

Dosage

MasterSet AC 102 is used at dose rates up to 4 litres per 100kg of cementitious binder. The dosage rate is dependent on the ambient concrete temperatures, cement chemistry and the amount of acceleration required.

The degree of set-acceleration increases with dose rates, allowing the concrete producer to control the setting rate of his product.

Typically, each litre of MasterSet AC 102 used per 100kg of cement will accelerate setting times by an additional 1 hour at moderate temperatures. Higher doses will be needed to maintain the same set acceleration under winter conditions.

Since setting time and concrete strength are also influenced by the chemical and physical composition of the basic ingredients of the concrete, trial mixes should be made with job materials approximating job conditions to determine the dosage required for a given degree of acceleration and strength gain.

Packaging

MasterSet AC 102 is available in 1000 litre pallecons and bulk delivery.

Storage & Shelf Life

Keep only in the original container in a cool, well-ventilated place. Protect from direct sunlight. Store protected against freezing.

MasterSet AC 102 has a shelf life of 12 months.



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Precautions

For the full health and safety hazard information and how to safely handle and use this product, make sure that you obtain a copy of the Safety Data Sheet (SDS) from our office or website.

Disclaimer

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STATEMENT OF RESPONSIBILITY

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NOTE

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MB Solutions Australia Pty Ltd

ABN 69 634 934 419
11 Stanton Road
Seven Hills NSW 2147

Freecall: 1300 227 300

www.master-builders-solutions.com/en-au

MB Solutions New Zealand Ltd

45C William Pickering Drive
Albany, Auckland
New Zealand

Phone: +64 9 414 7233

Emergency Advice:

1300 954 583 within Australia (24hr)
0800 001 607 within New Zealand

