

## MORSET®

### Non-Chloride, Non-Corrosive Set Accelerator for Mortar

#### Description

MORSET® is a non-chloride, non-corrosive admixture that accelerates cement hydration resulting in shortened setting times and increased early strengths. MORSET is an aqueous solution of organic and inorganic compounds and does not contain any chloride compounds such as calcium chloride. MORSET is manufactured to comply with the requirements of ASTM C 494 as a Type C admixture. MORSET weighs approximately 1.32 kg/L (11 lbs/gal).

#### Product Uses

MORSET is used wherever it is desirable to reduce the setting time or increase the early strength of mortar or stucco. This results in a saving in masonry construction time during cold weather. MORSET is not intended to prevent mortar from freezing. However, the time required for protection from freezing may be substantially reduced. Cold weather masonry construction practices must be followed.

#### Product Advantages

MORSET, non-corrosive, non-chloride set accelerating admixture for masonry mortar and stucco, provides setting time results and early strength development similar to that provided by calcium chloride, but without the corrosive effect of calcium chloride. MORSET can, therefore, be used where potential corrosion of embedded steel must be avoided. It can be used where uncoated or coated steel reinforcement or ties are present.

Because MORSET does not contain chloride, it does not contribute to efflorescence of the mortar. When pigments are used to provide a specific color tone, trial batches are strongly recommended to ensure the desired color is developed and to establish the range of addition rates allowed. Morset is compatible with other Grace admixtures. Testing with the specific materials proposed for use is recommended to determine the actual addition rates necessary to produce the desired results.

#### Chemical Action

MORSET speeds up the reaction between the cement and the water so that at any given time, more of the gel, the binder that glues the sand particles together, is produced. The gel provides the set and strength properties of the mortar. It is produced more rapidly in mortar admixed with MORSET and is responsible for the set acceleration.

The formation of gel is accompanied by the generation of heat. The accelerated rate of gel formation caused by MORSET produces a more rapid strength development which may reduce the time that the mortar requires protection from low temperatures. As the temperature becomes colder, MORSET becomes more effective.

#### Application Information

##### Addition Rates:

MORSET provides comparable setting times at addition rates similar to liquid calcium chloride. MORSET

is used at addition rates ranging from 250 mL to 2500 mL (approximately 8 to 80 fl oz) per bag of cement. The amount used will depend upon the degree of acceleration required and the mortar and ambient temperatures. It is recommended that the exact addition rate be determined by testing with the actual materials under job site conditions. The following addition rates are offered as a guideline and are based on average performance with a variety of materials and conditions. MORSET should be added separately to the mix. It can be added on the sand, in the water, or after all other ingredients are in the mixer. MORSET should not come in contact with other additives prior to entering the mortar.

Minimum Addition Rates		
mL/bag of cement (oz/bag of cement approx.)		
Air Temp. °C (°F)	Portland	Masonry(N)
10 (50)	500 (16)	250 (8)
0-10 (32-50)	1000 (32)	500 (16)
-7-0 (20-32)	1500 (48)	75 (24)
< -7 (20)	2000 (64)	1000 (32)

#### Packaging:

MORSET is available in 19 L (5 U.S. gal) pails, 208 L (55 U.S. gal) drums and 1,250 L (330 U.S. gal) mini-tote containers.

#### Freezing:

MORSET will freeze at approximately -20°C (-5°F) but its properties are completely restored by thawing and thorough agitation.

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