

M-CAST

Product Description

M-CAST™ 64 is a zero VOC synthetic additive specifically designed for water retention in vibro-compacted/“semi-dry” concrete applications. This is an extremely thixotropic additive that allows the user to increase the level of water in concrete formulations without sacrificing high viscosity/form retention under static conditions. Under shear, these concrete formulations have fluid characteristics. The increase in water can either be used to increase quality and strength of the concrete, to allow the user to reduce the cement content, thus reducing the cost. M-CAST 64 also allows for better surface quality of the finished product, has no adverse effect on water absorption, and in most formulations, reduces pave lift without the use or reduction of silicone additives.

Typical Analysis

Nature: Acrylic copolymer in aqueous dispersion
Appearance (20°C): White milky liquid, low viscosity
Solids content: 30% pH (20°C): 3 Density (20°C): 1.06

Applications

M-CAST 64 is specially adapted to the pavers and other block manufacturing. Its capacity to increase the amount of water in the initial concrete formulation permits better hydration, an increase of the mechanical properties, and an improvement of the product appearance. With M-CAST 64 the yield performance of the concrete formulation is enhanced, which allows the user to improve product appearance. During manufacturing, the blocks will retain their shape and gain greater strength. The use of M-CAST 64 in vibro-compacting concrete increases the mechanical properties by 10% and reduces production off-grade.

Processing Instructions

A dosage of 0.3%, 5 fluid oz per 100 lb cement weight is recommended. Under such conditions, the water content in the initial concrete formulation is increased by 15%. The M-CAST 64 is conventionally introduced in the concrete mixer with the dry raw materials. The high alkalinity of the concrete activates the thixotropic behavior of M-CAST 64.



With and without M-Cast 64



Without M-Cast 64



With M-Cast 64

Storage

M-CAST™ 64 should be protected from the effects of weathering and stored between 5° and 40°C. This product can be irreversibly altered by frost.

Once opened, packaging should be resealed immediately after use.

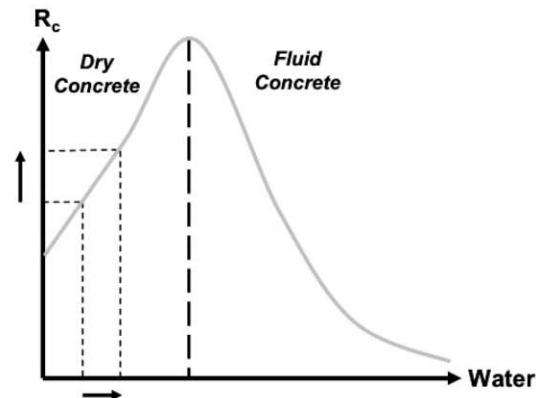
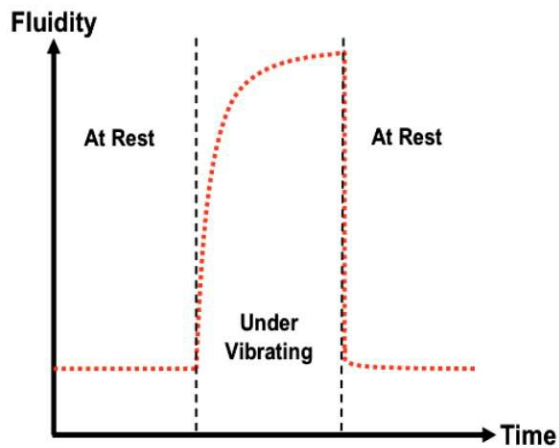
Under these conditions, products should be used within 6 months after opening

Standard Packaging

220 L plastic drums
1 000 l containers
Bulk

Health & Environmental Data

Please refer to the Material Safety Data Sheet.



- **Fluidity under vibration (improves the appearance)**
- **Mechanically stable at rest**
- **Allows an increase in water content**
- **Increases the mechanical performance**
- **Optimizes the cement content**