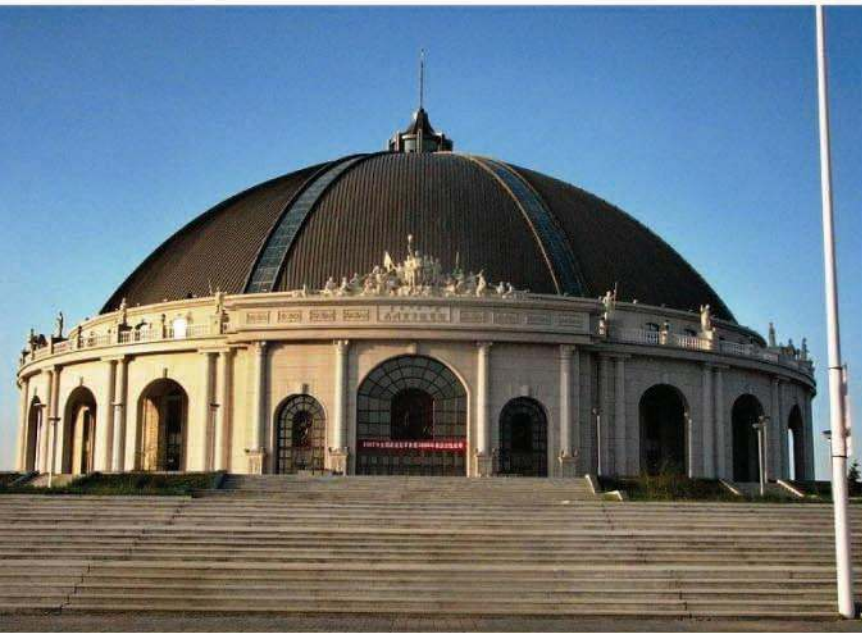


# MNC-AE2

ASTM C 260

Air-Entraining Admixture



## Description

MNC-AE2 is an air entraining admixture which generates a highly stable air void system for increased protection against damage from freezing and thawing, severe weathering, or deicer chemicals. MNC-AE2 is a light yellow powder product designed to generate specification-quality air systems. Based on a high-grade saponified formulation, MNC-AE2 is chemically similar to vinsol-based products, but with increased purity and supply dependability. MNC-AE2 complies to ASTM C 260 Standard Specifications for Air-Entraining Admixtures for Concrete.

## Uses

MNC-AE2 air-entraining admixture may be used wherever the purposeful entrainment of air is required by concrete specifications. Formulated to perform across the entire spectrum of production mixes, MNC-AE2 generates quality, freeze-thaw resistant air systems in concrete conditions that include the following:

- ◆ Low Slump
- ◆ Paving
- ◆ Central Mix
- ◆ Extruded Slip Form
- ◆ Mixes Containing Hot Water and Accelerators
- ◆ Precast
- ◆ High Cement Factor
- ◆ Fly Ash and Slag
- ◆ Superplasticizers
- ◆ Manufactured Sands

## Physical-chemical characteristics: (at 20 degree C)

Appearance	Viscosity (Pa. s)	Specific Gravity (g/cm <sup>3</sup> )	pH Value	Air Content (%)	Surface Tension (mN/m)
Light yellow powder	0.18- 0.32	1.05-1.10	7.0- 9.0	3	33.18

## Advantages

1. Increases the bond strength and avoid losing of concrete compressive strength because of entrained air.
2. Preserves internal water and effectively reduces permeability
3. Enhances resistance to surface deterioration caused by de-icing chemicals, sulfate attack and corrosive water.
4. Has more stable performance of anti-freezing/thawing compare with other air entraining products.
5. Requires less mixing water used per cubic meter of concrete, therefore bleeding is reduced.
6. Reduces bleeding and segregation of the concrete.
7. Be compatible with other admixtures.
8. Be non-toxic, non-flammable, and corrosion resistant.
9. Has high bonding strength, easier to be pumped and compacted.

## Application

Air is introduced into the concrete by the mechanics of mixing and stabilized into millions of discrete semi-microscopic bubbles by MNC-AE2. These air bubbles act much like flexible ball bearings increasing the mobility, or plasticity and workability of the concrete. This can permit a reduction in mixing water with no loss of slump. Placeability is improved. Bleeding, plastic shrinkage and segregation are minimized.

Through the purposeful entrainment of air, MNC-AE2 remarkably increases the durability of concrete when exposed to severe freezing and thawing. It has also demonstrated a remarkable ability to resist the action of frost and deicing salts as well as sulfate, sea and alkaline waters.

## Addition Rate

Testing or prior experience with the job materials and job equipment is necessary to determine the proper dosage and minimum mixing time. Recommended addition rate: Add 0.005- 0.015% for mortar or concrete.

## Package & Storage

The product is packed in polywoven bag with plastic liner at 10kg. Cautions should be taken to prevent packages from being torn by sharp-ended objects while being transferred or delivered. The shelf life is 3 years.