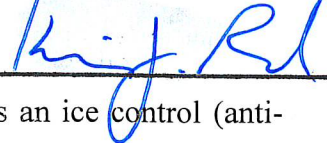


**LOUISIANA  
DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT  
SPECIFICATIONS**

**CALCIUM MAGNESIUM ACETATE (CMA)**

Approved for  
Maintenance Division

By: 

**DESCRIPTION:**

This specification covers Calcium Magnesium Acetate (CMA) for use as an ice control (anti-icing/deicing) material for road and bridge maintenance.

**GENERAL REQUIREMENTS:**

CMA shall be non-toxic, biodegradable, and shall not contain any form of chloride, including sodium chloride (salt).

**SPECIFIC REQUIREMENTS:**

Material shall be production grade meeting the following properties and test method requirements:

PROPERTY	ASTM TEST METHOD	REQUIREMENTS
Calcium Magnesium Acetate (CMA)		3:7 Ca to Mg molar ratio
Hydrated CMA		96% (minimum)
Shape		Hard, spherical pellet or angular, asymmetric granules
Sieve Analysis, % Passing	C 136	
No. 4		90
No. 14		10
Bulk Density	D 1895B	40 – 44 pounds/cubic foot
Residual Base		0.4 meg base/gm (maximum)
pH	E 70	8 to 10 (in a 10% solution)

Test methods shall be the latest in effect.

**PACKAGING AND DELIVERY:**

Calcium Magnesium Acetate (CMA) shall be packaged in moisture-proof bags weighing 50 to 80 pounds. Each bag shall be legibly labeled with the manufacturer’s, product name/description, and the net weight of the material.

Material shall arrive at the delivery point in a free flowing and usable condition on non-returnable pallets.

Instructional information including recommendations and application rates for a variety of environmental conditions shall be included with each shipment.

**SAMPLING AND ACCEPTANCE:**

Acceptance will be based on visual inspection.

The materials will be sampled if the quality of the product is in doubt. A sample will consist of one (1) quart of material taken at random from the shipment in accordance with the sampling requirements of ASTM D 632.