Why CMA?

Cryotech CMA (calcium magnesium acetate) is a non-corrosive, biodegradable, environmentally safe replacement for chloride deicers and urea. It exhibits superior toxicological and corrosion properties. When used according to guidelines, CMA is an effective deicer that is safe for steel, concrete, groundwater, wildlife and vegetation.

BENEFITS

- Less corrosive than tap water
- Safest deicer for concrete
- Mitigates chloride corrosion, chloride free
- Can be used on new concrete (dependent on quality), cured for at least 30 days
- Safer for pets than sodium chloride
- Manufactured as a round pellet to be less dusty than irregularly shaped deicers
- Complimentary customer training upon request

PERFORMANCE

- Patented Unipel technology ensures uniform size, shape, and composition of each pellet
- Works best above 20°F (-7°C)
- Long lasting effects, better than chloride salts
- Breaks/inhibits bond between snow/ice and pavement making snow/ice easier to remove
- Requires fewer applications than other common deicers
- Creates some brine and a dry, oatmeal-like consistency with snow for improved traction
- Applies easily, can be used straight, mixed with salt or sand, and as a liquid

ENVIRONMENT

- Safer for vegetation
- Low toxicity to aquatic species
- Increases soil permeability, calcium and magnesium are soil amendments
- Acetate readily biodegrades to carbon dioxide and water
- Minimal mobility in soil, unlikely to reach groundwater
- Does not contain nitrogen or chlorides

APPLICATION

- Apply early in the storm to prevent snow/ice bonding
- First application: ~10 lbs/1000 ft² (50 g/m²)
- Allow time for CMA to penetrate and loosen the snow/ice pack before removing snow/ice
- Re-apply when new snow/ice accumulation shows first tendency to bond

See reverse side for product specifications | Complete technical brochure available upon request
# CRYOTECH CMA® PRODUCT SPECIFICATIONS

<table>
<thead>
<tr>
<th>COMPOSITION</th>
<th>APPEARANCE</th>
<th>BULK DENSITY</th>
<th>PARTICLE SIZE</th>
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</thead>
<tbody>
<tr>
<td>Calcium Magnesium Acetate (CMA) 3:7 Ca to Mg molar ratio</td>
<td>White to off-white spherical pellet</td>
<td>Approximately 44 lbs/ft³ (0.70 g/cm³)</td>
<td>Sieve: Tyler 4, Tyler 14, Particle Passing: 90% (wt) min, 10% (wt) max</td>
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<tr>
<td>Hydrated CMA + other acetates - 96% minimum</td>
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<tr>
<td>Inert Material - 4% maximum</td>
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<table>
<thead>
<tr>
<th>TYPICAL pH</th>
<th>INSOLUBLES</th>
<th>PACKAGING</th>
<th>HANDLING</th>
</tr>
</thead>
<tbody>
<tr>
<td>8 to 10 in a 10% solution</td>
<td>4% (wt) maximum</td>
<td>55 lbs (25 kg) poly bags - 40 bag minimum, 2205 lbs (1000 kg) Super Sacks - 1 super sack minimum, Bulk - 20 metric ton minimum</td>
<td>Store in original container, Avoid excess moisture which may cause caking, Preserve pellet integrity by not overhandling</td>
</tr>
</tbody>
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**Corrosion Rates of Various Deicers**

![Corrosion Rate Chart](chart.png)

Relative Corrosion Rate on Steel in Concrete