## NEWS ALERT



## How Do MCI®-2005/2005 NS Admixtures Compare to the Competition?







When building new concrete structures, ready mix suppliers, project owners, and specifying engineers naturally want to use the product that works best for the job. So, in the case of corrosion inhibitors, what are the defining features of how MCI® admixtures line up against the competition? Here are some key factors to know when comparing MCI®-2005 and MCI®-2005 NS amine carboxylates against other corrosion inhibiting admixtures on the market.

- MCI®-2005/2005 NS do not accelerate set time. Calcium nitrite typically does, sometimes to great disadvantage by decreasing workability and increasing cold joint formation.
- MCI®-2005/2005 NS meet ASTM C1582. Amine alcohol corrosion inhibiting admixtures do not.
- MCI®-2005/2005 NS have small dosage rates compared to calcium nitrite and competitor amine alcohols (MCI®: 1-1.5 pt/yd³ [0.6-1 L/m³]; Competition: 1-6 gal/yd³ [5-30
- MCI®-2005 NS has no noticeable impacts on concrete physical properties including compressive strength, set time, and air content, unlike competing corrosion inhibitors. (MCI®-2005 slightly delays set time, which is often desired.)
- MCI®-2005/2005 NS are certified to meet NSF Standard 61 for use in potable water structures. Competitor technologies are not.
- MCI®-2005/2005 NS contain renewable resources (MCI®-2005 in particular is a USDA Certified Biobased Product). Calcium nitrite admixtures do not.
- MCI®-2005/2005 NS do not increase shrinkage compared to a control. Calcium nitrite admixtures can have serious problems with shrinkage cracking.

Cortec\* Corporation is the global leader in innovative, environmentally responsible VpCI and MCI corrosion control technologies for the Packaging, Metalworking, Construction, Electronics, Water Treatment, Oil & Gas, and other industries. Headquartered in St. Paul, Minnesota, Cortec<sup>\*</sup> manufactures over 400 products distributed worldwide. ISO 9001 and ISO 14001 Certified, and ISO 17025 Accredited.



MCI® vs. Competitor Admixtures			
Feature	MCI®-2005/ MCI®-2005 NS	Competitors	
		Calcium Nitrite	Amine Alcohol
Set Acceleration	No	Typically Yes	No
Meet ASTM C1582	Yes	Yes	No
Dosage Rates	1-1.5 pt/yd³ (0.6-1 L/m³)	1-6 gal/yd³ [5-30 L/m³]	
Noticeable Impact on Physical Properties	No (except for delayed set time of MCI®-2005)	Yes (may affect fresh or hardened properties, or both)	
Certified to Meet NSF Standard 61	Yes	No	
Contain Renewable Resources	Yes	No	
Increase Shrinkage	No	Yes	Data not available

Each of these qualities carries important implications for the builder and can affect workability, sustainability, or even long-term durability, all of which typically translate into economic savings. MCI®-2005/2005 NS admixtures come out of the comparison with obvious advantages.

Log in to the rep section of our MCI® website to access more specific competitor comparisons soon: <a href="https://www.cortecmci.com/login/">https://www.cortecmci.com/login/</a>

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