

Emerald-C[™] Copper Carbonate-Based Mineral Feed Ingredient

Why Emerald-C™?

- Maintains animal gut health and increases performance
- Does not contain sulfates or chlorides
- Excellent source of carbonate for feed premix
- Stable, non-reactive with other feed ingredients
- Superior bioavailability optimizes copper absorption
- Non-dusting powder provides exceptional flowability
- Enhanced formulation and health benefits versus copper sulfate
- Comparable performance at a lower cost versus leading, chloride-based TBCC product

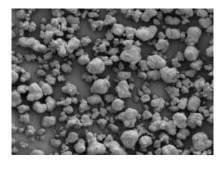
Emerald-C™ is a chloride-free, OMRI listed mineral feed ingredient proven to enhance animal health and performance. The free-flowing, copper carbonate-based green powder is ideally suited for humid environments. Extremely easy to handle and blend, Emerald-C is non-hydroscopic and insoluble in water.

Emerald-C[™] offers the simplest and most concentrated form of copper (56%) available with greater bioavailability than copper sulfate. It is highly stable and non-reactive with vitamins and other essential premix ingredients. As a bound copper, Emerald-C becomes active in the digestive system, where it counts!





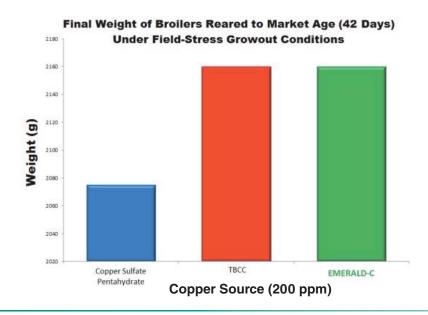
Emerald- $\mathbb{C}^{\mathbb{M}}$ is also available as a granular product to accommodate increased flow and equipment requirements.



Emerald- $\mathbb{C}^{\mathbb{M}}$ powder particles have spherical morphology which enables ease of flow and premix blending.

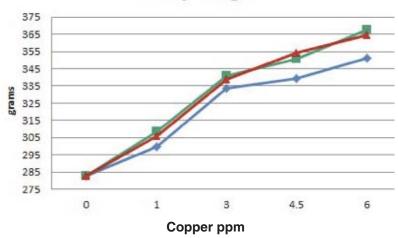


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Emerald- $C^{\mathbb{M}}$ significantly outperforms copper sulfate and is comparable to the leading TBCC product.

Body Weight



■ Emerald-CTM

▲ TBCC

Copper Sulfate

Emerald- $C^{\mathbb{M}}$ and the leading TBCC product demonstrate comparable bioavailability as measured in body weight.

Emerald-C [™] Composition	Typical Analysis (maximum)	Physical Properties
Copper (II) CarbonateCopper min: 55%	 Copper: 56%* Iron: 0.3% Lead: 30 ppm Cadmium: 5 ppm *versus 25.2% in copper sulfate. 	 Green, non-dusty powder Particle size: ~20 µm Bulk density: ~80 lb./ft.3 Insoluble in water at ≥ pH 3 Packaging: 50 lb. bags or 2000 lb. sacks

