MILORGANITE SAFETY

Trusted for over 95 years

Milorganite is produced with your safety in mind every single day. It complies with all applicable federal and state requirements and can be used with confidence in your lawn, landscape, and garden.

Milorganite meets stringent criteria for health, safety and the environment and is more heavily regulated by the United States Environmental Protection Agency (EPA) than synthetic fertilizers.

Daily Testing for EPA and State Standards

Milorganite is intensively analyzed to ensure compliance with all applicable standards established by the EPA and every state in which Milorganite is sold. Metals and other pollutants and pathogens are analyzed daily. As shown by the table, metals concentrations in Milorganite are much less than allowed for an Exceptional Quality fertilizer.

The Truth About Metals

Metals are not all bad. Some metals are micronutrients and are necessary in small amounts for plants to grow and reproduce, including copper and zinc, which naturally occur in the environment. For a product like Milorganite, federal and state regulations have established limits for metals to protect public health and the environment. Milorganite contains metals at levels found safe by the EPA when Milorganite is used as directed. Milorganite has over 95 years of experience producing a product that is both safe and effective.

Heat Drying Kills Pathogens

Milorganite is heat-dried in large-scale, dryers that operate at 900-1200°F. The extreme heat and dryness kills pathogens.

No Salts or Added Pesticides or Herbicides

Milorganite is composed of organic matter and nutrients and contains no added pesticides or herbicides. It will not burn.

Children and Pets

Milorganite is safe for your children and pets when used as directed and stored out of their reach. Milorganite is composed of organic matter and nutrients and contains no added pesticides or herbicides.

Metals and Fertilizer Micronutrients Milorganite vs. U.S. EPA Limits

Metals and Micronutrients	EPA Exceptional Quality Limit	2024 Milorganite Average
Arsenic	41 mg/kg	5.5 mg/kg
Cadmium	39 mg/kg	0.56 mg/kg
Copper*	1,500 mg/kg	200 mg/kg
Lead	300 mg/kg	29 mg/kg
Mercury	17 mg/kg	0.24 mg/kg
Molybdenum*	75 mg/kg	11 mg/kg
Nickel	420 mg/kg	25 mg/kg
Selenium	100 mg/kg	4.3 mg/kg
Zinc*	2,800 mg/kg	420 mg/kg

** Essential micronutrients*

Some dogs are attracted to the odor of Milorganite, which may lead to them rolling on freshly fertilized areas or eating it off the lawn or garden. After spreading Milorganite, monitor your dog to determine their interest in Milorganite. If they show interest, keep them off your lawn for about 24 hours. You can reduce attraction by watering your lawn after application.

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Non-Leaching Phosphorus

Phosphorus in runoff into our waterways is a significant pollution problem. Excess phosphorus causes algae blooms, fish kills, and odors. Plants, including grass, need phosphorus. It contributes to important functions such as root development and growth. University research shows the phosphorus in Milorganite is slow-release, reducing the risk that phosphorus will leach from soils into surface or groundwater. In contrast, other fertilizers often contain quick-release phosphorus that is more likely to leach. A university One study found that Triclosan—a commonly used antibacterial, antifungal agent used in a range of products from soap to toothpaste—was detected at very low levels in vegetables fertilized with Milorganite, with corn having the highest concentration.

Micro-impurities: Pharmaceuticals and Personal Care Products

In modern society, it's inevitable that trace amounts of pharmaceuticals and personal care products will be present in wastewater. Although detectable, concentrations of these compounds are extremely low in Milorganite.

From water reclamation, Milorganite production, to harvest and consumption; it's a long pathway for these micro-impurities to reach humans. The risk they pose to people and the environment is extremely low and is reduced at every step along the way. Milorganite is a leader in investigating the risk caused by these compounds.

Item Tested	% Triclosan
Toothpaste (Colgate®)	0.30%
Milorganite®	0.0002%
Sweet Corn Fertilized with Milorganite®	0.000003%

Source: Dr. George Snyder. *"Uptake of the Pharmaceutical Triclosan in Vegetables Fertilized with a Triclosan-containing Biosolids."* University of Florida, 2013.

One study found that Triclosan—a commonly used antibacterial, antifungal agent used in a range of products from soap to toothpaste—was detected at very low levels in vegetables fertilized with Milorganite, with corn having the highest concentration. A 154 lb person could eat up to 1,249 lbs of this corn daily without any adverse effect, indicating that the risk of Triclosan exposure from Milorganite is extremely low.

Per- and polyfluoroalkyl substances (PFAS) Chemicals

PFAS are a group of more than 9,000 man-made chemicals that are fire, oil, grease, water, and stain resistant and are found in a wide array of consumer and industrial products, including non-stick cookware, food packaging, dental floss, cleaning products, and cosmetics.

We do not use PFAS in the production of Milorganite fertilizer. Wastewater reclamation facilities are passive recipients of PFAS contained in wastewater emanating from residential, commercial, and industrial products. PFAS concentrations in wastewater streams vary significantly depending on local industry and historical firefighting operations at local airports.

Milorganite strongly believes that control of PFAS sources prior to entry into the wastewater stream is the solution to continued PFAS contamination.

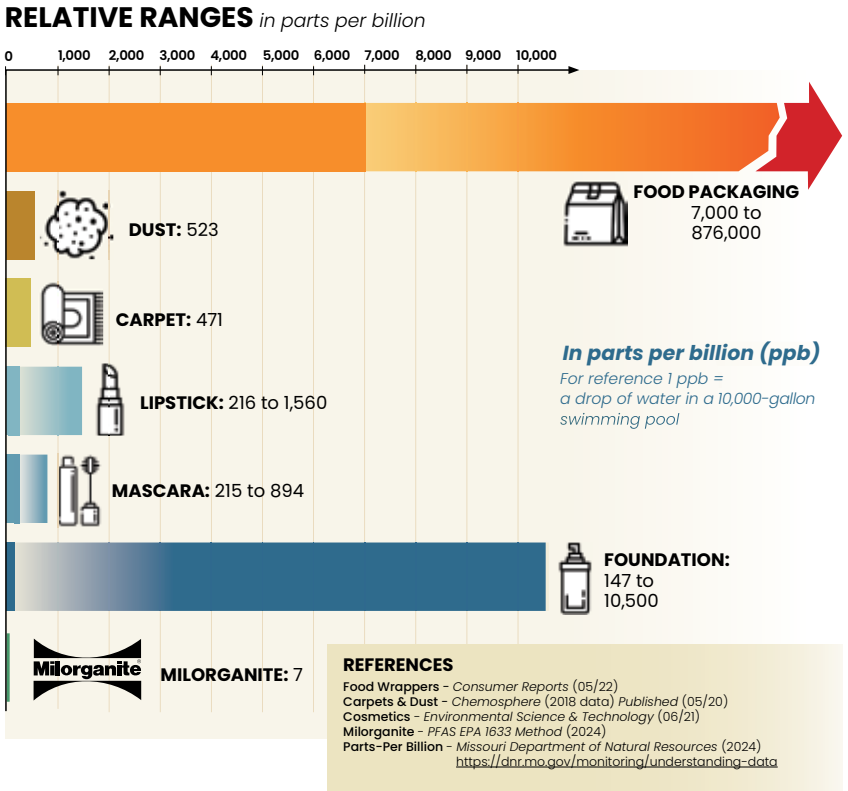
National and state PFAS regulatory standards for biosolid fertilizers like Milorganite are still forthcoming. Several states have established Perfluorooctane sulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) concentrations of less than 20 parts per billion (ppb) for biosolids like Milorganite.

Using EPA's approved testing protocol for PFOA and PFOS, the three most current results for these chemicals in Milorganite products averaged under seven ppb.

By contrast, PFAS has been detected at the following much higher concentrations in various other products:

- Dust in an average home has 523 ppb
- Lipstick contains 216 ppb to 1,560 ppb
- Fast-food packaging is 7,000 to 876,000 ppb

We recognize and share the public's concern about PFAS and fully support more research into their impacts on public health.



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