



Colorant Environmental and Safety Data

Amerimulch® is committed to your safety and the safety of our environment. When your pets or children walk through, in, over and on mulch that has been colored with Heartland® Enriched Colorants by Amerimulch, should this give you any pangs of concern? No!

Mulch manufactured with Heartland Enriched Colorants by Amerimulch is just as safe, if not safer, than conventional wood mulches. As recommended by the Mulch and Soil Council, Amerimulch submitted our Heartland Ultra Colorants to an independent, accredited laboratory for testing. The colorants were studied for acute exposure through ingestion, inhalation, dermal contact and eye contact. The results were that our colorants qualify for classification in Category IV, the lowest concern category the test recognizes. Here are the areas of safety concern that we at Amerimulch have addressed, consistent with industry leadership:



What's in the colorant? Is there anything in the mulch colorants that is dangerous?


No. The primary ingredients are water, iron oxide pigments, and carbon black pigments. Some forms of carbon black can be considered hazardous if airborne in respirable quantities and with small particle sizes, but in the mulch industry we use a form of carbon black with larger flake sizes, and that is suspended in liquid until it is mixed with the wood fiber, and therefore never becomes airborne in any significant quantity. Iron oxide pigments are often used in food container coloring or in cosmetics. Anything can be dangerous, if improperly used in too large a quantity, but Heartland Enriched Colorants by Amerimulch are no more dangerous than common household substances like vinegar or liquid dish soap. Specifically, no chemical in the formulations is considered hazardous in the concentration amounts used in the formulations.

Do your colorants have any heavy metals, lead or cadmium-based colors that are dangerous?

Heavy metals occur in nature, including soil and wood, in small trace amounts. In tests commissioned from independent laboratories, none of our mulch colorants have tested above any reporting threshold levels for any heavy metals. That means they contain no more heavy metals than regular wood mulches, or than the soil upon which the mulch is placed.

Our customers' satisfaction and product quality are always our primary focus. We do our best to make sure our products are safe and environmentally friendly. See the chart, below, to compare test results of Amerimulch materials to the EPA's maximum pollutant concentration levels for certain materials allowed in soils and composts:

HEAVY METALS: Regulatory Limits on Heavy Metals Applied to Soils							
Parts Per Million	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Zinc
Soil	75	85	3000	4300	420	840	7500
Sunburst Red - R345	<0.79	20	80	220	14	<0.019	55
Black - BK901	<0.77	<0.38	1.3	5	<0.96	<0.02	<1.9
Ameri-Red - R101	<0.75	18	69	30	4.5	<0.02	65

 Amerimulch® is a member of the ChromaScape® family of brands. For more information, go to www.chromascape.com.



What about long-term exposure of your colorants to the environment? Are there any concerns about the environmental status of your products?

No. None of our mulch colorants require EPA reporting under any applicable regulations, including SARA sec 313, RCRA (Resource Conservation & Recovery Act), CERCLA (Comprehensive Environmental Response, Compensation & Liability Act), and TSCA (Toxic Substance Control Act).

I've heard concerns about something called VOCs. What are VOCs? Why are they objectionable? Are they in your colorants?

VOC stands for Volatile Organic Compound. Something is classified as “volatile” if it evaporates readily at normal atmospheric pressure and temperatures; thus morning dew is an example of something that is volatile. Something is classified as “organic” if it contains carbon, usually meaning it has been generated from some sort of living organism. The reason this is important for environmental and safety concerns is that VOCs tend to contain chemicals called aromatic hydrocarbon solvents, including xylene, toluene, naphtha, benzene, and others. Many coatings, such as solvent-based paints, release these chemicals into the atmosphere as coated surfaces dry, where they are bad for the ozone layer and perhaps for the lungs of those who inhale them.

Amerimulch colorants are water-based, not solvent-based. Our colorants do contain some trace amounts of VOCs, but depending on the shade and color, can all be classified as either “VOC-Free” or “Low VOC” based on EPA guidelines used in the paint industry – the closest industry relevant to our products.

Are your colorants safe for the workers in the plants that produce colored mulches?

At Amerimulch, safety comes first for our employees and for our customers' employees. Our products are safe for their intended use; of course, someone could misuse them and get injured, as with any material. Some precautions need to be taken to avoid spills, to be able to clean up spills if they do occur, and to avoid getting colorant in the eyes where they may be mildly irritating. But with normal intended use and with reasonable and inexpensive precautions, our colorants pose no danger to anyone. The Material Safety Data Sheets (MSDS Sheets) are sent to each of our customers, and when those sheets are revised, revised versions of the MSDS sheets are sent if there is any significant change in the safety of the materials. Under regulations from the Occupational Safety and Health Administration (OSHA), manufacturers must provide these useful sheets to any purchaser of chemical products. These regulations mandate that any material classified as hazardous in concentrations greater than 1.0% of the raw material, or 0.1% if carcinogenic, must be identified and listed on the MSDS sheet under composition information of hazardous ingredients. Our MSDS sheets allow workers to see in print that Heartland Enriched Colorants by Amerimulch do not pose a threat to their safety or health.

What are your colorants composed of?

Heartland Enriched Colorants by Amerimulch consist of the following materials:

- Pigments/colorants – organic and inorganic: 40 to 70% of the Heartland Colorant.
- Water – main vehicle carrier: from 15 to 30% of the Heartland Colorant.
- Humectants– may be used for freeze depression: from 0.5 to 4% of the Heartland Colorant.
- Resins – to help the coating and adhesion of the pigment to the wood fiber: 5 to 30% of the Heartland Colorant.
- Additives – to help the colorant's adhesion to the wood fiber: from 0.5 to 5% of the Heartland Colorant. Some additives can be hazardous in concentrated form but Amerimulch colorants use them in such extremely small quantities that they are not a health risk. Any of the additives we use in our formulations that do meet the OSHA reporting requirements on our incoming MSDS sheets from our suppliers are NOT used in a concentration greater than 1% in our outgoing liquid colorants, so they do not need to be disclosed on the MSDS sheets and thus are considered safe.

If you have any further questions about the safety of our colorants, or for support data regarding the safety of Heartland Enriched Colorants by Amerimulch, please call or contact your Amerimulch Regional Sales Manager at 888-556-3304.