



Earth's Outlet, Inc. - PO Box 691915 - Houston, Texas 77269

Pure Black Castings™ Technical Data Sheet

Pure Black Castings™: This product is produced indoor in a climate-controlled facility under strict quality control standards. This is a new dimension for the production of a great fertilizer that just happens to be certified for organic use. This patented system is the culmination of 25 years of slowly transitioning from composting to vermicomposting and finally developing a system that works and **does not contain any worms or worm eggs**. Here is how it works:

- a. The worms in our facility are in an environment very similar to their natural environment.
- b. They consume the feedstock over and over again, until the microbes have broken down all of the organic matter.
- c. There are natural microbes such as yeast, phototropic bacteria, lactic acid bacteria, actinomycetes & mycorrhiza fungi present in the worms gut.
- d. The soil microbes very rapidly reproduce because their average life span is two hours. When the microbes die, they release the nutrients and decomposed organic matter that the worms feed on. Worm have no teeth, they cannot consume the organic matter until the microbes break it down. The microbes both internally and externally are converting the inorganic minerals to the organic form.
- e. The sum of the energy and exudates from the dying microbes are used to feed other members of the soil microbial food web. They all end up going through the worm's gut and being coated with organic calcium from their calciferous gland. This happens over and over again. Each time it passes though the worm, another layer of nutrients, humic acid, and live microbes is contained within the calcium coating. It is the different number of layers that gives the sustained release effect of the pure Black Castings™.
- f. There is also nitrogen-fixing bacteria that convert nitrogen (N₂) from the air into a form the plant can use. The microbes enhance soil structure, which improves infiltration and degradation of pollutants. A sterile environment caused by chemicals compacts causing run off.
- g. Each cast is covered with various thickness of calcium that enables the pure Black Castings™ to be effective over a long period of time. As the moisture dissolves the calcium, it is an immediate food source for the plants. Once the calcium has been dissolved, the nutrients, micronutrients, and microbes will be released into the root zone creating a healthy soil food web. You will not see any layering effects with pure Black Castings™.
- h. Each year for 3 years you use less and less pure Black Castings™. It just depends on how sterile your soil is and how much you cut back on the synthetic nitrogen and pesticide use.

Recommend the use of VermaPlex® as a companion product to maintain stressed areas due to transplant, extreme temperatures or high traffic areas.

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