

CLASS I COMPOST

Compost is not soil and soil is not compost. When evaluating true compost products, the fact that there are several types of compost products available must be considered. The type of use desired, methods of application and incorporation available, soil characteristics at the application site, and site topography must all be considered to select the most beneficial class of compost.

When selecting the proper class of compost, the following indicators and information should be evaluated as a total. Some items may have slight variance from the target listed; however, the product can be professionally evaluated by looking at ALL the indicators involved as a whole (especially stability and maturity indicators).

Compost Classification utilizes three basic areas of evaluation to determine the correct class for a given product. These three areas include:

1. **Analytical** – how does the material analyze regarding chemical, physical, stability, and maturity indicators? Was it tested by utilizing compost testing methods and evaluation?
2. **Manufacturing** – How was the product produced? Was it produced utilizing methods that insure consistent quality, weed seed destruction, and pathogen destruction?
3. **Application / risk** - How can the compost be utilized? What levels of application and incorporation should be used? Combining data from all three of these areas will indicate the risk factor relating to plant germination and overall health that exists with use of the product.

REQUIREMENTS TO MEET CLASS I STANDARDS

MATURITY/ANALYTICAL

| | |
|---|--|
| Minimum Stability Indicator (Respirometry) | The product should obtain a rating of stable to very stable. |
| Maturity Indicators | <ul style="list-style-type: none"> ▪ Ammonia N / Nitrate N Ratio - < 4 ▪ Carbon to Nitrogen Ratio - < 12 ▪ Percentage of Germination and Vigor – 80% or more for both Germination and Vigor |
| pH – Acceptable Range (1:5 by weight) | 6.0 – 8.4 |
| Soluble Salts – Acceptable Range (1:5 by weight) | Maximum of 5 mmhos/cm. |
| Testing and Test Report Submittal Requirements | STA / TMECC |
| Chemical Contaminants | The submittal documents should show that the product meets or exceeds the US EPA Class A standard, 40 CFR 503.13 tables 1 & 3 levels. |
| Bulk Density; % Inorganics; % Moisture; Particle Size Distribution, Primary, Secondary Nutrients; Trace Elements; Organic Matter Expressed in Percentage and Pounds Per CY | Must report on submittal documentation. |
| Pathogens | The submittal documents should show that the product meets or exceeds the US EPA Class A standard 40 CFR 503.32(a) standards. |

MANUFACTURING

| | |
|---|--|
| Minimum Manufacturing / Production Requirement | Each composting facility must be fully permitted by the Colorado Department of Public Health and Environment or their appropriate state agency. If it is exempt from state permitting requirements, it will certify that it follows all guidelines and procedures for production of compost meeting EPA 40 CFR 503.13 Requirements for production and marketing of Class A material for unrestricted use and distribution. Written certification from manufacturer is required. |
|---|--|

APPLICATION / RISK

| | |
|---|---|
| Applications <i>(Note: The listed applications for the various compost class designations are intended for general consideration purposes. The actual use or application of any class of material can be subjective depending on the soil characteristics, quantity used, the method of incorporation, and other factors utilized by the buyer or user.)</i> | Horticultural, Nursery, Container Mixes, Turf, Sod, Seed Bed Preparation, Raised Garden, Vegetable Gardens, Top Soil Blends, Backfill, Erosion Control. Watering to leach excess salts not required. Can be applied at high volume. Incorporation can be at shallower depths. |
| Best Management Practices (BMP) <i>(How the compost is applied and incorporated; effect on performance of product.)</i> | The BMP used by the buyer, user, or applicator will effect the performance of products and also the applications for any product. BMP's will also affect the risks regarding plant germination and vigor associated with the use of soil amendments and compost |
| Incorporation Notes | Can be used as a high percentage of the soil profile. Incorporation not critical (top 4" recommended). |