



## Betco Green Earth Criteria

### 1. Product Performance

- a. Performance tested to the same criteria as standard products in the same category. Lab testing will be comprised of either 3rd party lab performance testing according to ASTM standards or testing designed and performed in the Betco laboratories.

### 2. Safe for End Users

- a. Acute and Chronic Toxicity
  - i. The undiluted products will not contain any acutely toxic materials and shall not be toxic to humans. No product with an HMIS health hazard greater than 2 shall qualify as a Green Earth product. No ingredients shall be used that have chronic toxicity effects that pose a risk to humans under anticipated use conditions. The exception shall be hazardous chemicals that react during the manufacturing process to produce a non-hazardous reaction product.
    1. Acute oral toxicity >5000 mg/kg
    2. Acute dermal toxicity >2000mg/kg
- b. Carcinogens, Mutagens, and Reproductive Toxins
  - i. No product shall qualify for the Green Earth product line if it contains more than a trace of non-intentionally added carcinogens, mutagens and reproductive toxins. Betco will continue to source and use raw materials that do not contain trace amounts of known or suspected carcinogens, mutagens or reproductive toxins.
- c. Skin and Eye Irritation
  - i. The undiluted product will not be corrosive to skin or eyes or cause irreversible damage to skin and eyes.
- d. Fragrances
  - i. All fragrances used must be approved by the International Fragrance Association (IFRA).
- e. Colorants
  - i. Only Food Grade, natural, D&C or FD&C classified dyes and colorants may be used.
- f. Flammability
  - i. The concentrated products will not be classified as flammable or combustible. The standard for this is that the products will have a flash point greater than 200°F when tested by the TAG closed cup flash point apparatus.

### 3. Better for the Environment

- a. Biodegradability
  - i. The product must demonstrate Ready Biodegradability based on the cumulative biodegradabilities of all organic components or through whole product testing according to OECD standards.
- b. Volatile Organic Compound (VOC) Content
  - i. No ozone Depleting Compounds shall be used.
  - ii. HAPS free = No Hazardous Air Pollutants shall be used.

c. Volatile Organic Compounds (VOC's)

i. The Volatile Organic Compounds limit if present will meet the California Regulations for Reducing Emissions from Consumer Products as defined by the California Air Resources Board. These are the strictest VOC regulations in the United States.

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d. Prohibited Ingredients

i. Heavy metals including, lead, hexavalent chromium, or selenium; either in the elemental form or compounds, zinc.

ii. 2-butoxyethanol

iii. Alkylphenol ethoxylates

iv. Phosphorus

v. Optical Brighteners

vi. Petroleum distillates

vii. Formaldehyde

viii. Bioaccumulating Compounds.

e. Aquatic Biodegradability

i. The finished product must show ready aquatic biodegradability according one of the OECD standards or through calculations based on individual raw materials.

f. pH

i. The pH of the concentrated product must be between 2 and 11.5 unless it can be shown through testing that products outside of this pH range are non-corrosive to skin and eyes.

**4. Better for Animals**

a. No Animal Testing

i. No animal testing will be performed on any finished product in the Green Earth line.

b. Low Toxicity to Aquatic Life

i. The product as used shall not be toxic to aquatic life.

**Betco Natural Criteria**

1. Meet all criteria for Green Earth as posted

2. Meet or exceed natural content defined in appropriate USDA category OR contain > 95% biorenewable/mineral content excluding water.

**Betco Bioactive Solutions**

1. Meets all the Green Earth Criteria other than 2e. We do not restrict the use to FD&C dyes.

2. Must contain bacillus or enzymes capable of degrading targeted wastes.

**Laundry/Warewash.**

Due to the nature of these products a different set of criteria is necessary. These products by their nature will require higher pH's and thus the criteria for green has been modified based on third party recommendations for products in this category. The laundry



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and warewash criteria for products used through closed loop dispensing systems that dispense directly into a dish machine or laundry machine are as follows:

1. The concentrate must comply with all elements of the standard Green Earth Criteria described above.
2. The product must only be distributed and used in a closed loop SKU.
3. The closed loop dispensing system must be compliant with all dispenser regulations in the locality in which it is located.
4. The pH at the most concentrated dilution must be within the range of 2 to 11.5.

