



EARTH DOCTOR, INC.

SAFETY DATA SHEET

Version 1.11
Revision Date: 18 June 2018

Clear-Flo 4003

1. PRODUCT AND CORPORATE IDENTIFICATION

1.1 Product Identifiers

Product name: Clear-Flo 4003
Product form: Powder
Product Number: 04003
Index Number: 04003
CAS Number: not applicable to mixtures

1.2 Relevant identified uses of the substance or mixture

Identified uses: Wastewater Treatment

1.3 Details of the supplier of the safety data sheet

Company: Earth Doctor, Inc.
P. O. Box 718
Flint Hill, VA 22627
United States
Telephone: +1 540 636 1236
Fax: +1 540 636 1770
Email: colors@shentel.net

1.4 Emergency telephone number

Chemtec, US: +1 800 424 9300 24/7
Chemtec, International: +1 703 527 3887 24/7

2. HAZARDS IDENTIFICATION

2.1 OSHA/HCS status

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.122).

Not a dangerous substance or mixture according to Globally Harmonized System (GHS).

2.2 Classification of the substance or mixture

None



2.3 GHS label elements

Hazard pictograms

None

2.4 **Signal word:** None

2.5 **Hazard statements** No hazard statements

2.6 Precautionary statements

Prevention:

P232 - Protect from moisture.

P233 - Keep container tightly closed.

P260 - Do not breathe dust.

P262 - Do not get in eyes, on skin or clothing.

P264 - Wash thoroughly after handling.

P281 - Use personal protective equipment as required.

Response:

P301 + P330 + P331 - IF SWALLOWED, rinse mouth. Do NOT induce vomiting.

P302 + P350 - IF ON SKIN, Gently wash with plenty of soap and water.

P304 + P341 - IF INHALED, if breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P301 + P3351+ P338 - IF IN EYES, Rinse cautiously with water for several minutes. Remove contact lenses, if present and easily removed. Continue rinsing.

P362 - Take off contaminated clothing and wash before reuse.

Storage:

P402 + P404 - Store in a dry place. Store in a closed container.

P412 - Do not expose to temperatures exceeding 50°C or 122°F

Disposal:

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

2.7 Hazards not otherwise classified (HNOC) or not covered by GHS:

This product contains BioSafety Class 1 microorganisms as defined by the Centers for Disease Control to be unlikely to cause disease in healthy humans or animals. However, persons with compromised immune systems should avoid contact with open wounds and/or breathing dust or mist from manufacturing processes. These organisms are susceptible to many commonly used antibiotics, and Earth Doctor, Inc. is willing to supply antibiotic sensitivity information to any doctor or import health authority requesting it.

Although bacterial cultures included in this product were grown in a sterile aqueous medium containing a variety of nutrients, including corn syrup solids, digests of soybean and/or skim milk, glucose or other sugars, vegetable oils, including olive oil, yeast extract, mineral salts, etc., the concentrations of these residual nutrients are believed to be below the levels capable of triggering irritation or allergic reactions. This product also contains a *yucca schidigera* extract, which may contribute to irritation of skin and eyes.



2.8 HMIS Rating: Health hazard = 1
Flammability = 1
Physical hazard = 0

2.9 NFPA Rating: Health hazard = 1
Fire hazard = 0
Reactivity hazard = 0

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance / mixture: Mixture

3.2 Other means of identification: Not available

3.3 CAS number / other identifiers

CAS number: Not applicable to mixtures
Product code: 4003

Ingredient Name	%	CAS number
Wheat bran base, pasteurized	75 - 85	116469-86-4
Viable bacterial cultures	1 - 5	Proprietary
<i>Yucca schidigera leaf extract</i>	<1	223749-05-1
Maltodextrin	<1	9050-36-6
Water	10 - 15	7732-18-5

The precise composition has been withheld as a means to protect confidentiality while still enabling health and safety considerations. There are no additional ingredients present, which, within the current knowledge of the supplier and in the applicable concentrations, would be classified as hazardous to health or the environment and would require reporting in this section.

Occupational exposure limits, if available, are listed in section 8.

4. FIRST AID MEASURES

4.1 Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for several minutes.

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Maintain an open airway. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.

Skin contact: Wash contaminated skin with plenty of soap and water. Wash clothing before reuse.

Ingestion: **Do not induce vomiting.** Wash out mouth with water. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give at least 2 to 4 cups of water to dilute the product. Stop if the



exposed person is feels sick, since vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause irritation. If vomiting occurs, the head should be kept low, so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

4.2 Most important symptoms / effects, acute and delayed

Potential acute health effects

Eye contact	Contact with dust may cause irritation.
Inhalation	May cause irritation.
Skin contact	Contact with dust may cause mild irritation.
Ingestion	Swallowing dust may mildly irritate the gastrointestinal tract.

Overexposure signs / symptoms

Eye contact	Contact with dust may cause irritation.
Inhalation	May cause respiratory irritation.
Skin contact	May cause mild irritation.
Ingestion	Gastrointestinal irritation

Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	Treat symptomatically.
Specific treatments	No specific treatment.
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.

See toxicological information (section 11)

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Appropriate extinguishing media:	Use water, water fog, foam, dry chemical or carbon dioxide; whatever is suitable for the surrounding fire.
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5.2 Special hazard arising from the substance or mixture

None.

5.3 Hazardous thermal decomposition products

Decomposition products may include the following materials:
carbon dioxide, carbon monoxide.

5.4 Special protective actions for fire fighters

No special measures are required.

5.5 Special protective equipment for fire fighters

Evacuate area. Fire fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in a positive pressure mode.

5.6 Flammability properties

Flash point	None.
Lower explosive limit	Not applicable
Upper explosive limit	Not applicable
Auto-ignition temperature	None.



6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:	Ensure adequate ventilation.
For emergency responders:	See also the information in "For non-emergency personnel".
Environmental precautions:	This product is not anticipated to be hazardous to the environment.

6.2 Methods and materials for containment and cleaning up

Spill:	Sweep and shovel up dry product. Recover for use, if possible. Product may be flushed to sewer. Vacuuming or wet sweeping may be used to avoid dust dispersal.
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7. HANDLING AND STORAGE

7.1 Protective measures

Put on appropriate personal protective equipment (see section 8). Do not get in eyes or on skin or clothing. Do not swallow the product. Avoid breathing its dust. If, during normal use, the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep the product in its original container or a similar one, kept tightly closed when not in use.

7.2 Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking or smoking. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

7.3 Conditions for safe storage, including any incompatibilities

Store in original container protected from direct sunlight in a dry and cool area, away from food and drink. Keep container tightly closed until ready for use. Product is moisture sensitive. Containers that have been opened must be closed, after use. Do not store in unlabeled containers. Strong acids, strong bases or strong oxidizers may inactivate biological cultures.



8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
Wheat bran base, pasteurized	No data available
Viable bacterial cultures	No data available
<i>Yucca Schidigera</i> leaf extract	No data available
Water	No data available

Appropriate engineering controls: If user operations generate dust, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

8.2 Exposure controls

Hygiene measures

Wash hands, forearms and face thoroughly after handling this product, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing.

Eye / Face protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side shields.

Hand protection

No special protection is necessary.

Body protection

A laboratory coat should be worn, to keep the product off street clothing.

Other skin protection

Shoe covers are recommended, to keep the product out of socks and shoes.

Respiratory protection

Use a properly fitted, air-filtering respirator should be worn, when working closely with the product to prevent its entering the nose and lungs as this can cause irritation and sinus congestion.



9. PHYSICAL AND CHEMICAL PROPERTIES

a) Physical state	Powder
b) Color	tan to brown
c) Odor	Yeast-like slightly fermented grain
d) Odor threshold	No data available
e) pH	No data available
f) Melting point	Not applicable.
g) Boiling point	Not applicable.
h) Flash point	Not applicable.
i) Evaporation rate	Not applicable.
j) Flammability (solid, gas)	Not applicable.
k) Lower explosive limit	Not applicable.
l) Upper explosive limit	Not applicable.
m) Vapor pressure	Not available.
n) Vapor density	Not available.
o) Specific Gravity	0.66 to 0.77 g/cm ³ at 25°C (77°F)
p) Solubility	Can be suspended in water, but otherwise insoluble.
q) Partition coefficient	No data available
r) Auto-ignition temperature	Not available.
s) Decomposition temp.	No data available
t) Viscosity	Not applicable.
u) Volatility	Not applicable

10. STABILITY AND REACTIVITY

10.1 Reactivity	No data available.
10.2 Chemical stability	The product is stable under normal conditions.
10.3 Possibility of hazardous reactions	None under normal processing.
10.4 Conditions to avoid	Stable under normal conditions. Excessive temperature variations below 32°F or above 122°F. Moisture, product is hygroscopic.
10.5 Incompatible materials	Strong acids or alkali compounds and strong oxidizing agents may inactivate biological cultures.
10.6 Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.



11. TOXICOLOGICAL INFORMATION

11.01 Acute toxicity

Product / ingredient name	Result	Species	Dose	Exposure

11.02 Irritation / Corrosion

Product / ingredient name	Result	Species	Score	Exposure	Observation
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11.03 Sensitization

There is no data available.

11.04 Carcinogenicity Classification

None of the ingredients of this product are listed as carcinogens by ACGIH, IARC, NIOSH, NTR or OSHA.

11.05 Specific target organ toxicity (single exposure)

There is no data available.

11.06 Specific target organ toxicity (repeated exposure)

There is no data available.

11.07 Aspiration hazard

Name	Result

11.08 Likely routes of exposure: Dermal contact. Eye contact. Inhalation. Ingestion.

11.09 Potential acute health effects

Eye contact	Irritation and redness.
Inhalation	Inhalation of dust in high concentration may cause irritation of the respiratory system.
Skin contact	Prolonged or repeated contact may dry the skin and cause irritation.
Ingestion	May cause stomach discomfort.

11.10 Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	No data available.
Inhalation	No data available.
Skin contact	No data available.
Ingestion	Adverse symptoms may include sour stomach.

11.11 Delayed and immediate effects and also chronic effects from short and long term exposure



Short term exposure

Potential immediate effects No data available.

Potential delayed effects No data available.

Long term exposure

Potential immediate effects No data available.

Potential delayed effects No data available.

Potential chronic health effects

General No data available.

Carcinogenicity None known.

Mutagenicity No data available.

Teratogenicity No data available.

Developmental effects No data available.

Fertility effects No data available.

11.12 Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value

12. ECOLOGICAL INFORMATION

12.1 Toxicity

If very high concentrations are released into a water body, oxygen levels may temporarily decrease in the immediate area. This product is unlikely to bioconcentrate and is unlikely to create any negative environmental impact, other than a slight reduction in oxygen concentration at the site of release.

12.2 Persistence and degradability

The organic components of the product are biodegradable.

12.3 Bioaccumulative potential

There is no data available.

12.4 Mobility in soil

Soil / water partition coefficient (K_{oc}) There is no data available.

Mobility There is no data available.

12.5 Other adverse effects

No data available.



13. DISPOSAL CONSIDERATIONS

13.1 Disposal methods

Neat, unused product is not considered a hazardous waste, according to RCRA regulations 40 CFR 261. For proper disposal of used materials, an assessment must be completed to determine the proper waste management options permissible under applicable rules, regulations and/or laws governing the client's location. Wash containers down with water and disinfect with a 1% sodium hypochlorite solution before disposal. Then, remove or deface the product label to avoid confusion if the pail or drum is to be refilled with other materials. Clean, empty containers can be recycled or disposed of through an approved waste management facility.

13.2 United States - RCRA Toxic hazardous waste lists

None of the ingredients in this product are on the RCRA "P" or "U" lists.

13.3 Registry of Toxicological Effects of Chemical Substances

Ingredient name	RTECS Number

14. TRANSPORT INFORMATION

	DOT Classification	IMDG	IATA
UN number	None	None	None
UN proper shipping name	Not regulated as hazardous by DOT	Not regulated as hazardous by IMDG	Not regulated as hazardous by IATA
Transport hazard class	None	None	None
Packing group	None	None	None
Environmental hazards	No	No	None
Additional information	None	None	None

AERG

14.1 DOT-RQ Details

None of the ingredients in this product have a reportable quantity requirement.

14.2 Special precautions user

None.



14.3 **Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not available

15. REGULATORY INFORMATION

- 15.01 **U.S. Federal regulations:** TSCA 8 (a) PAIR: None
TSCA 8 (a) CDR Exempt / Partial exemption: Not determined
- 15.02 **United States inventory: (TSCA 8b)** All components are listed or exempted.
Clean Water Act (CWA) 307: None
Clean Water Act (CWA) 311: None
- 15.03 **Clean Air Act Section 112 (b): Hazardous Air Pollutants (HAPS)** This product does not contain any Class 1 or Class 2 ozone depletors, nor was it made with such chemicals.
- 15.04 **Clean Air Act Section 602: Class I Substances** Not listed.
- 15.05 **Clean Air Act Section 602: Class II Substances** Not listed.
- 15.06 **DEA List I Chemicals (Precursor Chemicals)** Not listed.
- 15.07 **DEA List II Chemicals (Essential Chemicals)** Not listed.
- 15.08 **SARA 302 / 304:** Not listed.
Composition / information on ingredients
None of the ingredients were found on this list.
- 15.09 **SARA 304 RQ:** Not applicable.
- 15.10 **SARA 311 / 312 classification:** None.



Composition / information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard

15.11 SARA 313 Toxic Chemical Release Inventory:

None of the ingredients are listed.

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

15.12 State regulations:

California Prop. 65:

None of the ingredients in this product are subject to Proposition 65 labeling requirements.

15.13 State regulations: Right-to Know Lists

California: None of the components are listed.

Connecticut: None of the components are listed.

Florida: None of the components are listed.

Illinois: None of the components are listed.

Louisiana: None of the components are listed.

Maine: None of the components are listed.

Massachusetts: None of the components are listed.

Maryland: None of the components are listed.

Minnesota: None of the components are listed.

New Jersey: None of the components are listed.

New York: None of the components are listed.

Pennsylvania: None of the components are listed.

Rhode Island: None of the components are listed.

Tennessee: None of the components are listed.



16. OTHER INFORMATION

16.1 History

Date of issue: 18 June, 2018
Version: 1.11
Prepared by: Kenneth J. Edwards, Jr.

16.2 Reason for revision: Review and minor data addition.

16.3 Key to abbreviations:

ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of classification and labeling of chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
Log P_{ow} = logarithm of the octanol/water partition coefficient
MARPOL 73/78 = International Convention for the Prevention of Pollution from Ships, 1973 as modified by the protocol of 1978 (Marpol = marine pollution)
UN = United Nations

16.4 Further information:

Earth Doctor, Inc., provides the information contained herein in good faith, in compliance with the Occupational Safety and Health Act of 1970, and is accurate, to the best of their knowledge. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Earth Doctor warrants that this product is of merchantable quality. The implied warranty for a particular purpose is limited to the extent the products are used for the purpose or uses described on the product's label or in any written instructions or materials distributed to the buyer by Earth Doctor and is hereby disclaimed, should the buyer use the products in a manner inconsistent with the uses or purposes described therein. In no event shall Earth Doctor be liable for any consequential, exemplary or incidental damages incurred by buyer, even if it has been advised of the possibility of such damages.

