SAFETY DATA SHEET

Section One: Name of the Product and of the Distributor

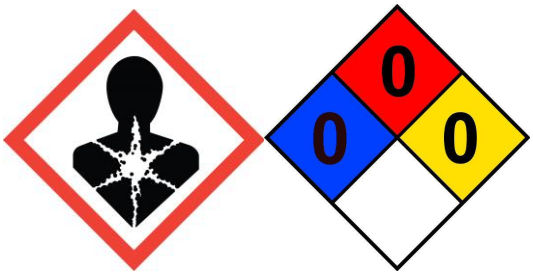
Product Name: ACT Trash Container Deodorizer Cleaner
CAS Registration: None
Synonyms: None

Distributed By: American Cleaning Technologies Inc. P.O. Box 386 Dacono, Colorado 80514-0386
Phone:303-833-5393

Section Two: Hazard Identification

Signal Word: Warning

H303: May be harmful if swallowed
H373, H351, H333



Section Three: Composition

The constituents of this product are being withheld under the provisions of 29 CFR §1910.1200(i). A full disclosure MSDS is available to industrial hygienists, physicians and treating nurses.

This product may contain minor amounts of silica; the OSHA PEL for respirable quartz in this product is 0.67 mg/m3 of total product. The PEL for total quartz in this product is 2.0 mg/m3 of total product.

According to the best information available to ACT, Inc., controlling total nuisance dust exposures to 2.0 mg/m3 of total product will control exposure to the occupational limits for silica.

Section Four: First Aid

Inhalation Exposure: Remove the person to fresh air; avoid concentrations of greater than 0.67 mg/m3 of respirable product (as determined by NIOSH 0600 or equivalent). Note to physician; respiratory distress may be due to an anaphylactic reaction to plant fibers, similar to byssinosis, and or (to a lesser extent) subtilisin exposures.

Eye Contact: Minor injury to the eyes may result if the powder is placed directly into the eyes. Normal use as directed is not expected to result in eye contact. In the event of contact, immediately flush with large amounts of isotonic eyewash. If eyewash is not available, flush eyes with lukewarm water. Seek medical evaluation.

Skin Contact: Wash exposed skin with warm water and soap.

Section Five: Fire Fighting

Not combustible. Will not contribute to combustion.

Flash Point	Auto ignition Temperature	L.E.L.	U.E.L
Will not flash	Will not autoignite	>10,000 mg/m3 (estimated)	NA

Section Six: Accidental Release

Spills and Emergencies: Sweep the dry material and dispose of as non-hazardous material. If large quantities are spilled (greater than 1,000,000 pounds), ACT, Inc. recommends collection of the powder and disposal at an industrial landfill.

Section Seven: Handling and Storage

Hazardous Decomposition Products: The addition of water will result in the generation of heat and pressure build up may occur in closed containers. Mineral acids (muriatic acid etc.) will result in violent effervescence and generation of copious amounts of CO2.

Incompatibility: The presence of acids will generate some carbon dioxide

Handling: Excessive handling may irritate unprotected skin, (not expected to occur if used as directed).

Storage: Store in a sealed container in a dry location.

Section Eight: Exposure Controls/Personal Protection

Compound Name	OSHA PEL **	ACGIH TL V**	NIOSH REL **	German MAK**
Silica (crystalline quartz)	Note 1	0.1	0.05 Ca*	0.15
Vegetable matter	0.2			
Inorganic mineral combustion byproduct	Note 1	Note 1	Note 1	Note 1
Amorphous siliceous mineral	Note 3	Note 3	Note 3	Note 3
Surfactant and pH buffer	NA	Note 4	NA	NA
pH adjuster (as CaO)	5	2	2	5
Non siliceous mineral stabilizer	Note 3	10	Note 3	None
Bacterial Mix	NA	0.00006	Note 4	Note 4
	NA	0.00006 C	0.00006 60 min STEL	NA

NOTES AND DISCUSSION ARE IN SECTION ELEVEN

Ventilation: Standard industrial hygiene ventilation and common sense practices should be used to control human exposures to this product.

Personal Protective Equipment:
Clothing: Standard work clothing should provide adequate protection. The clothing should be removed at the end of the work shift and maintained at the work site.

Gloves: Standard nitrile, latex or leather gloves will provide adequate protection. (Gloves are not needed to use the product when used as directed).

Eye Protection: Standard safety glasses with side shields are recommended for use with any and all cleaners.

Respiratory Protection: Workplace controls and good work practices are better than personal protective equipment including the use of respirators. These recommendations are only guidelines and may not apply to every situation. Respiratory protection equivalent to either N100 or the older HEPA filter (APR with a DFM (purple) cartridge) will provide adequate protection. It is the opinion of ACT, Inc. that respiratory protection is not needed when used as directed.

Personal Decontamination: Good personal hygiene should be exercised by all users of our product.

Section Nine: Physical and Chemical Characteristics

Boiling Point (°F):	>1000 °F(with significant weight loss at elevated temperatures)
Specific Gravity:	0.8 g/cm3
Melting Point:	>1000 °F
Vapor Density:	Will not form vapor at normal temperature and pressure.

Vapor Pressure:	Will not form vapor at normal temperature and pressure.
Molecular Weight:	Complex Mixture
Solubility(%v/v):	<5% (Estimated)
Photoreactive VOC's:	None
pH:	Not determined for the dry material
Evaporation Rate:	Will not evaporate
% Volatility:	<0.1%
Odor Threshold:	Not determined, anticipated to be greater than 7, less than 12
Odor:	Dry dusty odor
Appearance:	Gray powder

Section Ten: Stability

Stability: Material is stable. Spontaneous polymerization or reactions will not occur.

Section Eleven: Toxicological Information

* The "Ca" designation indicates that NIOSH considers the material to be a carcinogen and recommends the lowest feasible exposure concentration.

** All units are expressed as milligrams per cubic meter of air (mg/m3).

Note 1: The OSHA PEL for respirable quartz in this product is 1.56 mg/m3 of total product. The PEL for total quartz in this product is 4.6 mg/m3 of total product. The product has not been evaluated for the presence of other silica morphs such tripoli, tridymite and cristobalite.

Note 2: According to the best information available to American Cleaning Technologies Inc, (ACT, Inc.) controlling exposures to 2.0 mg/m3 of total product will control exposure to the occupational limits the silica. Persons allergic to corn should avoid contact with the dust.

Note 3: Total 15 mg/m3; respirable 5 mg/m3

Note 4: The content of subtilisins for all batches of this product is indeterminable. The listed TLV is for subtilisins, *per se*. Currently, the only OSHA validated analytical procedure is for subtilisins in bulk material. Using this analytical procedure for air monitoring would require an air volume of approximately 48,000 liters to measure subtilisins at or below the current TLV. The TLV is a "Ceiling Limit" and the REL is a 60 minute STEL.

The Bacterial profile is dynamic. Industrial hygienists, physicians and others permitted by 29 CFR 1910.1200 (i)(2) to receive information may contact the emergency number for Product Services Company of Jackson Mississippi at (601) 922-0868 and reference "Oil Gator" for more information. In any event, nonhuman exposures are typically not within the realm of MSDSs. However, to ensure the highest degree of safety, ACT, Inc. has evaluated the potential impact the microbial component this product may have on livestock, bloodstock and other agricultural stocks. One of the components, *Bacillus cereus,* has been associated with isolated (extremely few) cases of bovine abortion and bovine mastitis. The cases of diseases in cattle due to *B*. *cereus* are considered to be strictly opportunistic, and *B. cereus* is not considered a pathogen for cattle, nor for other animal species. In summary, normal, healthy animals should have no susceptibility to any of the microbial species in our product. There is no indication in the literature that the Bacterial component would pose any harm to animals in contact with Terra Firma Cleaner. All of the *Bacillus* species are common environmental Bacteria, and the *Micrococcus* species are not uncommon flora of animals.

General Discussion: The primary adverse health concerns with the product are due to incidental silica content. Smokers who use our product will be at a greater risk of contracting adverse health problems.

Notes to Industrial Hygienist and Physician: ACT, Inc. highly recommends that exposures to people with TB, silicotics and others with interstitial lung diseases or fibrosis of the lung should be controlled to a conservative level.

Acute Health Effects: Dust from the product will irritate eyes, skin and mucus membranes. Ingestion may cause immediate CO2 gas production in the stomach. Anaphylactic (allergic) reaction may occur in

people sensitive to cotton-like dusts.

Chronic Health Effects: Silicosis and silicotic-like lung changes may be expected from chronic (long term) inhalation exposures (with concomitant increase in susceptibility to TB). Contact dermatitis may result.

Cancer Hazard: Various morphs of silica have different carcinogenic ratings. This product is considered to contain a carcinogen due to the silica content. In the table below, we have presented carcinogenic ratings for the most carcinogenic silica morphs (which may or may not be actually present in the product).

Section Twelve: Ecological Data

Mysidopsis bahia (Americamysis bahia) and *Menidia beryllina* were used in the determination. Test duration was *M. bahia* (48 hours) and *M. beryllina* 96 hours. LC summary below:

MATERIAL TESTED	SPECIES	LC50
ACT Trash Container Deodorizer Cleaner®	*Menidia beryllina*	223.61 mg/L
	Mysidopsis bahia	74.07 mg/L
	Mysidopsis bahia	1.19 ppm
Reference Toxicant: (Sodium Laurel Sulfate)	*Menidia beryllina*	12.25
	Mysidopsis bahia	12.27

Section Thirteen: Disposal

Waste Disposal: If this material is disposed of in its raw form, the product probably would not meet the definition of a hazardous waste as defined by RCRA. However, if large quantities are spilled (greater than 10 pounds), ACT, Inc. recommends collection of the powder and disposal at an industrial landfill

Section Fourteen: Transport

DOT/TDG Information: Shipping Name: Not Regulated.

Section Fifteen: Regulatory Considerations

15.1. US Federal regulations: Contains minor amounts of silica (sand) (CASRN 14808-60-7)
SARA Section 311/312 Hazard Classes: Delayed (chronic) health hazard (silica)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

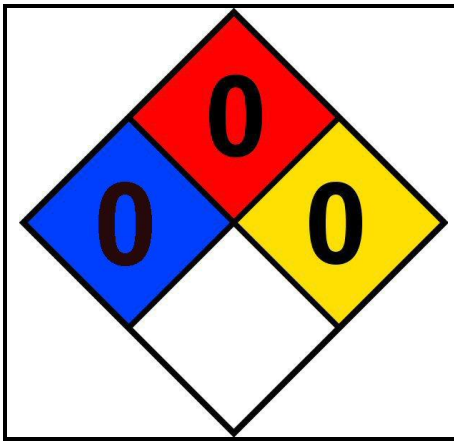
Environmental Regulations Resource Conservation and Recovery Act: If our product were discarded as purchased, the material would probably not be a hazardous waste as defined by RCRA. However, it remains the responsibility of the end user to determine compliance with RCRA and to perform testing as specified under 40 CFR §261.21 though §261.24. The following table addresses the expected listing for our product under RCRA.

§261.21 Ignitability	No
§261.22 Corrosivity	No
§261.23 Reactivity	No
§261.24 Toxicity (D Code)	None
F CODES	Unknown
K CODES	No
P CODES	No
U CODES	Unknown

Water Pollution Control Act: Not determined. This material should not be disposed of in municipal services or natural waters.

Community Right to Know (SARA III)

Spill Reportable Quantity (§302)	NA
SECTION 311(§370)	NA
SECTION 312(§370)	NA
SECTION 313(§372.65)	NA
EXTREMELY HAZARDOUS LIST(§355)	No



Hazardous Material Information System

Health	**0**
Flamability	0
Physical Hazard	0
Personal Protection	0

Toxic Substance Control Act: All of the constituents found in the product are believed to be on the TSCA inventory.

State Regulations: This MSDS has been prepared to comply with the provisions found in the Federal Department of Labor OSHA Hazard Communication Standard. Several states, most notably CA, PA, NJ and MA have independently promulgated regulations pertaining to MSDSs. ACT, Inc. has not specifically determined if this MSDS is in compliance with the provisions for any particular state. The information provided below is for general information only and is not necessarily complete. It is possible that the product contains other compounds which appear on various state lists.

California Proposition 65: Silica is included on the California "List of Chemicals Known to the State to Cause Cancer or Reproductive Toxicity." We believe that the information contained in this MSDS provides the information needed under Proposition 65 for the employer to inform the employee of the reproductive and carcinogenic hazards.

Massachusetts, NJ, Pennsylvania
This MSDS has not been prepared specifically to comply with these state regulations and may or may not contain compounds present at such levels which could require reporting as required by the state.

Section Sixteen: Dates and General Information

Date of preparation: April 11, 2019
Version 2019.4

DISCLAIMER
The information contained in this SDS relates specifically to the material and may not be valid if used in combination with other materials or in any unspecified process. The information on our product is accurate to the best of our knowledge but does not purport to be all inclusive and must only be used as a general guide. It is the user's responsibility to ensure that the product will be suitable for their particular use. The user assumes all responsibility for compliance with applicable Federal, State and Local Regulations. We do not accept liability for damage or loss that may occur from the use of this information.