

SAFETY DATA SHEET

1. Identification

Product Identifier AE 223 AE Bio Apple Blossom
Other means of identification
Product code AE-1410
Recommended use Non-pathogenic bacteria spotter and drain cleaner.
Recommended restrictions Professional use only.
Manufacturer/distributor/supplier/importer information
Company name Alan Environmental Products, Inc.
Address P O Box 934
Monmouth, IL 61462

Telephone (800) 991-3765
Fax (877) 991-3010
Emergency phone number INFOTRAC (800) 535-5053

2. Hazard(s) Identification

Physical hazards Not classified.
Health hazards Skin irritant Category 3
Environmental hazards Not classified
OSHA defined hazards Not listed.
Label elements None
Signal word Warning.
Hazard statement Causes mild skin irritation.
Precautionary statement
Prevention
Response If skin irritation occurs: Get medical advice/attention.
Storage
Disposal
Hazard(s) not otherwise classified (HNOC) None
Supplemental information None

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
2-butoxyethanol	111-76-2	1-2
Other components below reportable levels		90-100

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.
Eye contact Rinse with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Get medical attention. Eye wash stations should be located in work area.

Ingestion	Rinse mouth. Get medical attention if symptoms occur. Do not induce vomiting.
Most important symptoms/effects, acute and delayed	Dermatitis. Rash.
Indication of immediate medical attention and special treatment needed	Provide general support measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protecting clothing must be worn in case of fire.
Fire-fighting equipment/instructions	Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Wear appropriate protective equipment and clothing during clean-up. Wear eye/face protection.
Methods and materials for containment and cleaning up	Caution – spillages may be slippery. Large spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Small spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Never return spills to original container for re-use. For waste disposal, see section 13 of the SDS.
Environmental precautions	Do not release into the environment (see section 12). Avoid discharge into areas not consistent with package labeling.

7. Handling and storage

Precautions for safe handling	Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Do not store in extreme conditions.

8. Exposure controls/personal protection

Occupational exposure limits

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value
2-butoxyethanol	PEL	50 ppm

US ACGIH Threshold Limit Values

Components	Type	Value
2-butoxyethanol	STEL	20 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Species	Sampling Time
2-butoxyethanol	200 mg/g	Creatinine	Urine	End of shift.

Appropriate engineering controls Emergency eye wash stations and showers should be readily accessible. Provide natural or mechanical ventilation.

Individual protection measures, such as personal protective equipment

Eye/face protection Avoid contact with eyes. Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves.

Other None.

Respiratory protection Respiratory protection not required.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations When using do not smoke or use chewing tobacco. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

9. Physical and chemical properties

Appearance

Physical State Milky liquid.

Color White.

Odor Apple Blossom.

Odor threshold Not available.

pH 6-7

Melting/freezing point Not available.

Initial boiling point and boiling range >212°F (100°C)

Flash point >385°F (196°C)

Evaporation rate Not available.

Flammability Not available.

Flammability Limits

Upper Not available.

Lower Not available.

Vapor pressure Not available.

Vapor density Not available.

Specific gravity (water=1) 1.0

Solubility in water Soluble.

Partition coefficient (n-octanol/water) Not available.

Auto-ignition temperature Not available.
Decomposition temperature Decomposes on heating.
Viscosity Not available.

10. Stability and reactivity

Reactivity This product is stable and non-reactive under normal conditions of use.
Chemical stability Material is stable under normal conditions.
Possibility of hazardous reactions Hazardous polymerization does not occur.
Conditions to avoid Heat, flames can cause product to decompose.
Incompatible materials Strong acids, strong bases, strong oxidizing agents.
Hazardous decomposition products Carbon dioxide, carbon monoxide.

11. Toxicological information

Information on likely routes of exposure

Ingestion Expected to be a low ingestion hazard.
Inhalation Expected to be a low inhalation hazard.
Skin contact Repeated and/or prolonged skin contact may cause slight irritation.
Eye contact Repeated and/or prolonged eye contact may cause slight irritation.

Symptoms related to the physical, chemical and toxicological characteristics Dermatitis. Rash. May cause an allergic skin reaction.

Acute toxicity Not established.

Product	Route and Species	LD ₅₀
Bio Apple Blossom (CAS mixture)		
Acute	<i>Oral, rat</i>	48,500 mg/kg estimated
	<i>Dermal, rat</i>	>5,000 mg/kg estimated

*Estimates for product may be based on additional component data not shown

Skin corrosion/irritation May cause mild skin irritation.
Serious eye damage/irritation Not classified.
Respiratory sensitization Not classified.
Skin sensitization Not classified.
Germ cell mutagenicity Not classified.
Carcinogenicity Not considered a carcinogen.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
 Not Listed.
Reproductive toxicity Not classified.
Specific target organ toxicity – single exposure Not classified.
Specific target organ toxicity – repeated exposure Not classified.
Aspiration hazard Not considered an aspiration hazard.

12. Ecological information

Ecotoxicity

Product	Species	Test Results
Bio Apple Blossom (CAS mixture)		
Aquatic		
Crustacea	Daphnia	EC ₅₀ (48hr): 980 mg/L estimated
Fish	Oncorhynchus mykiss	LC ₅₀ (96hr): 400 mg/L estimated

*Estimates for product may be based on additional component data not shown

Persistence and degradability 2-butoxyethanol is considered readily biodegradable.

Bioaccumulative potential Potential to bioaccumulate is low.

Mobility in soil Not available.

Other adverse effects Not available.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations. Do not release to the environment.

Local disposal regulations Dispose in accordance with all applicable regulations

Waste from residues/unused product Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner. (see: Disposal instructions).

Contaminated packaging Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may contain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations

SARA 302 Extremely hazardous substance

Not listed.

SARA 304 Emergency release notification

Not listed.

SARA 311/312 Hazard Categories

Immediate Hazard - Yes

Delayed Hazard – No

Fire Hazard – No

Pressure Hazard – No

Reactivity Hazard – No

SARA 313 (TRI reporting)

2-butoxyethanol (Glycol ether category)

16. Other information, including date of preparation or last revision

Issue date 11/5/2014

Revision date 11/5/2014

Version #	1
HMIS® ratings	Health: 1 Flammability: 0 Physical hazard: 0
NFPA ratings	Health: 1 Flammability: 0 Instability: 0
Disclaimer	The information provided in this Safety Data Sheet is correct to the best of our knowledge, and have been obtained from resources believed to be reliable. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information related only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified by the text.
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