



SAFETY DATA SHEET

Freshduct Odor Eliminator Concentrate

BBJ Environmental Solutions
"The standard of care for indoor air"

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Name: Freshduct Odor Eliminator (Concentrate)

Product Codes(s): 433-24; 445-01; 455-01

EPA Registration No.: Not applicable

Synonyms: None known

REACH Registration Number: Some materials in this product have been registered according to Regulation (EC) 1907/2006. The remaining substances in this product have been pre-registered according to Article 2 REACH Regulation (EC) No 1907/2006.

1.2 Relevant identified uses of the substance or mixture and uses advised against

General Use: Odor control for HVAC systems and air ducts

Uses advised against: No uses advised against

1.3 Details of the supplier and of the safety data sheet

Manufacturer/Distributor

BBJ Environmental Solutions

6321 Pelican Creek Circle

Riverview, FL 33578 USA

+1-813-622-8550; Toll free: +1-800-889-2251

1.4 Emergency telephone number: Chemtrec (24 hours) +1-800-424-9300

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Eye Irritant - Category 2B [H320]

2.2 Label Elements

Labeling (REGULATION (EC) No 1272/2008)

Hazard Symbols None allocated

Signal Word: Warning

Hazard Statement(s): H320 - Causes eye irritation

Precautionary Statements:

[Prevention] P264 - Wash hands thoroughly after handling.

[Response] P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical attention.

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Chemical characterization (preparation)

Proprietary mixture consisting of low toxicity ingredients. The identities of the components in this product are a trade secret (29 CFR 1910.1200(i)) and are available to the attending physician or paramedical personnel in case of emergency.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified

SECTION 4 - FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product vapor or mist causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist, seek medical attention immediately.

Eyes: Immediately flush eyes with large amounts of water for 15 minutes. Remove contact lenses, if present and easy to do, after the first 5 minutes and continue rinsing, occasionally lifting upper and lower lids. If irritation persists obtain medical attention, preferably from an ophthalmologist.

Skin: Flush skin with large amounts of water while removing contaminated clothing. Wash affected area with soap and water. Wash contaminated clothing and shoes thoroughly before reuse. If irritation persists, seek prompt medical attention.

Ingestion: Rinse mouth with water. If conscious and alert drink 2 - 4 cupfuls of milk or water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

Eyes: May cause transient eye irritation. May cause chemical conjunctivitis.

Skin: May cause mild skin irritation.

Inhalation: Inhalation of mist or spray may cause irritation of the respiratory system.

Ingestion: May cause gastrointestinal upset with nausea, vomiting and diarrhea.

Chronic: No information available.

SECTION 5 - FIRE FIGHTING MEASURES

5.1 Extinguishable media

Suitable methods of extinction: Use extinguishing media appropriate for surrounding fire.

Unsuitable methods of extinction: None known

5.2 Special hazards arising from the substance or mixture

Solutions containing glycol ethers in water can form flammable vapors with air if heated sufficiently. Closed containers may explode due to the build-up of pressure when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent. Obtain medical attention.

5.3 Advice for firefighters

Full protective equipment including self-contained breathing apparatus should be used. Water may be used to cool closed containers to prevent pressure build-up and possible autoignition or explosion when exposed to extreme heat. If possible, firefighters should control run-off water to prevent environmental contamination.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear appropriate protective clothing designated in Section 8. Ventilate the area.

6.2 Environmental precautions

Avoid dispersal of spilled material or run-off and prevent contact with soil and entry into drains, sewers or waterways.

6.3 Methods and materials for containment and cleaning up

Cover drains and contain spill. Cover with a large quantity of inert absorbent. Shovel or sweep up product and into place into an approved container for proper disposal. Observe possible material restrictions (section 7.2 and 10.5). Clean contaminated area with soap and water.

6.4 Reference to other sections

For indications about waste treatment, see section 13.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling

Observe label precautions. Wear all appropriate protective equipment specified in Section 8. Keep containers closed when not in use.

Advice on protection against fire and explosion

Keep away from heat, sparks and flame. Solutions containing glycol ethers in water can form flammable vapors with air if heated sufficiently.

7.2 Conditions for safe storage, including any incompatibilities

Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10.5), food and drink. Transfer only to approved containers having correct labeling. Protect container against physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Containers of this material may be hazardous when empty as they contain product residues. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Do not take internally. Keep out of reach of children.

7.3 Specific end uses

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with exposure limits

8.2 Exposure controls

Engineering Measures: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to See Section 7.1.

Individual protection measures: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

Hygiene measures: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking or using the lavatory.

Eye/face protection: Wear protective goggles or safety glasses with unperforated side shields during use. Refer to 29 CFR 1910.133, ANSI Z87.1 or European Standard EN 166.

Hand Protection: Wear gloves recommended by glove supplier for protection against materials in section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

Other protective equipment: Protective clothing. Protective boots, if the situation requires.

Respiratory Protection: None required with normal use. Always use an approved respirator when vapor/aerosols are generated. Where risk assessment shows air-purifying respirators are appropriate use a full-faced respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls: Do not empty into drains.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear, colorless liquid
Odor	Scented (Clean Linen)
Odor Threshold	Not determined
Molecular Weight	Not applicable
Chemical Formula	Not applicable
pH	4.75 - 4.85 @ 20 °C (68 °F)
Freezing/Melting Point	-2 °C (28 °F)
Initial Boiling Point	110 °C (230 °F)
Evaporation Rate	Not determined
Flammability (solid, gas)	Not applicable
Flash Point	Not determined
Autoignition Temperature	Not determined
Decomposition Temperature	Not determined
Lower Explosive Limit (LEL)	Not determined
Upper Explosive Limit (UEL)	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Specific Gravity	1.005
Viscosity	Not determined
Solubility in Water	Complete
Partition Coefficient: n-octanol/water	Not determined
Volatiles by Volume @ 70° F	>80%

9.2 Other data

No data available

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity

No special reactivity has been reported.
Hazardous polymerization will not occur.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

None known

10.4 Conditions to avoid

Extreme temperatures. Contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Thermal decomposition products may include carbon oxides, aldehydes, ketones, organic acids.

SECTION 11 - TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute Oral Toxicity

LD50 - Rat: >5,000 mg/kg

Acute inhalation toxicity

LC50 - Rat: >202.18 mg/l

Acute dermal toxicity

No data available

Skin irritation

May cause slight skin irritation.

Eye irritation

May cause transient eye irritation and conjunctivitis.

Sensitization

No data available

Genotoxicity in vitro

No data available

Mutagenicity

No data available

Specific organ toxicity - single exposure

No data available

Specific organ toxicity - repeated exposure

No data available

Aspiration hazard

No data available

11.2 Further information

This material is not listed as a carcinogen by IARC, ACGIH, NTP or OSHA. No data is available regarding the mutagenicity and/or teratogenicity of this material in humans, nor is there available data that indicates that it causes adverse developmental and/or fertility effects in humans.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12 - ECOLOGICAL INFORMATION**12.1 Toxicity**

Material is expected to have low toxicity to aquatic organisms.

12.2 Persistence and degradability

Material is expected to be biodegradable.

12.3 Bioaccumulation potential

Not expected to bioaccumulate

12.4 Mobility

Mobility in the soil is expected to be high.

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other adverse effects**Additional ecological information**

No data available

SECTION 13 - DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****Product**

Methods of disposal: The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Hazardous waste: The classification of this product may meet the criteria for a hazardous waste.

SECTION 14 - TRANSPORT INFORMATION

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

This material is not regulated for transport.

Marine Pollutant: This product is not a marine pollutant.

SECTION 15 - REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for substance or mixture****U. S. Federal Regulations**

OSHA Hazard Communication Standard: This material is classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

OSHA Process Safety Management Standard: Components of this product are not regulated under OSHA PSM Standard 29 CFR 1910.119.

EPA Risk Management Planning Standard: Components of this product are not regulated under EPA RMP Standard (RMP) 40 CFR Part 68.

TSCA Status: All components of this product are listed on the Toxic Substance Control Act (TSCA) Inventory.

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories: Acute Health Hazard

SARA 313 Information: None of the chemicals in this product exceed the threshold (de minimis) reporting levels established by Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance

No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification:

No components of the product exceed the threshold (de minimis) reporting levels established by of these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): Contains no chemicals regulated under CERCLA.

Clean Air Act (CAA)

This product does not contain any chemicals that are listed as Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).
This product does not contain any Class 1 Ozone depletors.
This product does not contain any Class 2 Ozone depletors.

Clean Water Act (CWA)

None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986:

This product contains no chemical(s) known to the state of California to cause cancer or other reproductive harm.

Other U.S. State Inventories

None of the substances in this product are listed on any State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists.

Canada

WHMIS Hazard Symbol and Classification: None allocated

Canadian Controlled Products Regulations (CPR): This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations, and the MSDS contains all the information required by the Controlled Products Regulations.

Canadian Ingredient Disclosure List (IDL): Citric Acid (CAS #77-92-9) is listed on the IDL.

Canadian National Pollutant Release Inventory (NPRI): None of the ingredients in this product are listed on the NPRI.

European Economic Community

Labeling (67/548/EEC to 1999/45/EC): None allocated

Risk Phrases: R36 - Irritating to eyes.

Safety Phrases: S2 - Keep out of the reach of children.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

WGK, Germany (Water danger/protection): 1

Global Chemical Inventory Lists

Country	Inventory Name	Inventory Listing*
Canada:	Domestic Substance List (DSL).	Yes
Canada:	Non-Domestic Substance List (NDSL).	No
Europe:	Inventory of New and Existing Chemicals (EINECS)	Yes
United States:	Toxic Substance Control Act (TSCA)	Yes
Australia:	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand:	New Zealand Inventory of Chemicals (NZIoC)	Yes
China:	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan:	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea:	Existing Chemicals List (ECL)	Yes
Philippines:	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

*"Yes" indicates that all components of this product are in compliance with the inventory requirements administered by the governing country.

**"No" indicates that one or more components of this product are not on the inventory and are not exempt from listing.

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16 - OTHER INFORMATION

Hazardous Material Information System (HMIS)

Health	1
Flammability	1
Physical Hazard	0
Personal Protection	C

HMIS and NFPA Hazard Rating Legend

* = Chronic Health Hazard	2 = MODERATE
0 = INSIGNIFICANT	3 = HIGH
1 = SLIGHT	4 = EXTREME



National Fire Protection Association (NFPA)

Flammability



BBJ Environmental Solutions assumes no legal responsibility or liability from the described product's use. All chemicals possess unknown potential hazards. The information herein should be used only to supplement the end user's existing knowledge. Read directions for proper use. This SDS was written for the product as packaged. Product may turn yellow, orange or brown if pH becomes alkaline; however, this should not affect the product's effectiveness. If frozen, crystals may remain in the container after thawing. Shake until dissolved before using. Cleaning Contractors shall comply with all applicable OSHA regulations.

Preparation Date: 31 October 2013