SAFETY DATA SHEET

28825 Ranney Parkway, Westlake, Ohio 44145 U.S.A.
telephone: 001 440 716 9962 • toll-free 001 888 327 7301
fax: 001 440 871 9964

e-mail: med@applied-inc.com
web-site: www.applied-inc.com

Concentrator Cleaner

1. PRODUCT AND COMPANY IDENTIFICATION

Manufacturer
Applied Home Healthcare Equipment
28825 Ranney Pkwy.
Westlake, OH 44145

Contact: Applied Home Healthcare Equipment
Phone: (888) 327-7301
Email: med@applied-inc.com
Web: www.applied-inc.com

Product Name: Concentrator Cleaner
Revision Date: April 5, 2016
Version: 1.01
SDS Number: 519
Common Name: Cleaner
CAS Number: Mixture
Chemical Family: Cleaner
Chemical Formula: *** PROPRIETARY ***

Emergency Phone: +1-800-255-3924

2. HAZARDS IDENTIFICATION

The product as such is not classified as a hazardous substance or mixture according to OSHA standard.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

CAS #	Percentage	Chemical Name
N/A	**80-96%**	**Proprietary, non-hazardous, non-regulated**
111-76-2	**1-5%**	**2-Butoxyethanol**
7601-54-9	**1-5%**	**Phosphoric acid, trisodium salt**
9016-45-9	**1-5%**	**Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-**
6834-92-0	**1-5%**	**Silicic acid (H2Si03), disodium salt**

4. FIRST AID MEASURES

First Aid is not expected to be necessary if material is used under ordinary conditions as recommended.

Inhalation: Give oxygen or artificial respiration if needed. If symptoms develop, move victim to fresh air. If symptoms persist, obtain medical attention.

Skin Contact: Take off contaminated clothing and shoes immediately. Promptly flush skin with water for at least 15 minutes to ensure all chemical is removed. If reddening develops and/or persists, obtain medical attention.

28825 Ranney Parkway, Westlake, Ohio 44145 U.S.A.
telephone: 001 440 716 9962 • toll-free 001 888 327 7301
fax: 001 440 871 9964

e-mail: med@applied-inc.com
web-site: www.applied-inc.com

Eye Contact: Flush with large amounts of water for at least 15 minutes, lifting upper and lower lids occasionally. Remove contact lenses is present and easy to do so. If eye irritation persists, obtain medical attention.

Ingestion: Rinse mouth with water. Do NOT induce vomiting unless instructed to do so. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed:
The most important known symptoms and effects are described in the labelling (see Section 2) and/or Section 11.

Indication of any immediate medical attention and special treatment needed:
No data available.

5. FIRE FIGHTING MEASURES

Flammability: No data available
Flash Point: DNA
Flash Point Method: DNA
Burning Rate: No data available
Auto Ignition Temp: No data available
LEL: DNA
UEL: DNA

Extinguishing Media:
Water Spray
Carbon Dioxide
Alcohol-Resistant Foam
Dry Chemical

Special Hazards Arising From the Substance or Mixture:
Carbon Oxides Nitrogen Oxides
(NOx) Phosphorous Oxides
Silicon Oxides
Sodium Oxides

Advice for Firefighters:
Firefighters should wear full-face, positive-pressure respirators.

Further Information:
If incinerated, may release toxic fumes.
Use water spray to cool unopened containers.
See Section 7 for more information on safe handling.
See Section 8 for more information on personal protection equipment. See Section 13 for disposal information.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures:
Use personal protective equipment. Keep from contacting skin or eyes. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

28825 Ranney Parkway, Westlake, Ohio 44145 U.S.A.
telephone: 001 440 716 9962 • toll-free 001 888 327 7301
fax: 001 440 871 9964

e-mail: med@applied-inc.com
web-site: www.applied-inc.com

Environmental Precautions:
Prevent further release (leakage/spillage) if safe to do so. Do not allow product to enter drains. Do not allow to drain to environment.

Methods and Materials for Containments and Cleaning Up:
Absorb with liquid-binding material (sand, diatomite, universal binders, saw dust).
Neutralizing agent like Sodium Bicarbonate may also be used to absorb/neutralize any spilled material. Place contaminated material into suitable, closed containers for disposal.
Dispose of contaminated material according to Section 13.
After spillage has been collected, area may be flushed with water or wet-brushed. Ensure adequate ventilation.

Reference to Other Sections:
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment. See Section 13 for information on proper disposal.

7. HANDLING AND STORAGE

Handling Precautions:
Avoid breathing vapors or mist.
Avoid contact with eyes, skin, or clothing. Keep containers closed when not in use.
Do not expose containers to open flame, excessive heat, or direct sunlight. Keep away from sources of ignition.
Do not smoke while using material. Do not puncture or drop containers.
Handle with care and avoid spillage on the floor (slippage). Keep material out of reach of children.
Keep material away from incompatible materials. Wash thoroughly after handling.

Storage Requirements:
Keep container tightly closed. Store in a well-ventilated place.
Do not store at temperatures exceeding 50 °C/122 °F. Do not store in direct sunlight.

Store away from strong acids, strong bases, strong oxidizing agents, strong reducing agents, reactive metals (Zinc & Aluminum) and their alloys (Brass, etc.), Alkali metals, powdered metals, organic materials, chlorinated solvents, Phosphorous, Tin/Tin oxides, Lead, Copper and its alloys, Nickel, galvanized surfaces and Aldehydes.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:
All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94). Use local exhaust at filling zones and where leakage and dust formation is probable. Use mechanical (general) ventilation for storage areas. Use appropriate ventilation as required to keep Exposure Limits in Air below TLV & PEL limits.

Personal Protective Equip:

Eye/face protection: When using material use safety glasses and gloves according to HMIS PP, B. All safety equipment should be tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection: Handle with gloves made from Neoprene, Nitrile or Burma rubber. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact. Dispose of contaminated gloves according to applicable laws and laboratory practices.

28825 Ranney Parkway, Westlake, Ohio 44145 U.S.A.
telephone: 001 440 716 9962 • toll-free 001 888 327 7301
fax: 001 440 871 9964

e-mail: med@applied-inc.com
web-site: www.applied-inc.com

Body Protection: Chemically resistant gloves and safety glasses are recommended. Type of protective equipment should be selected based on concentration amount and conditions of use of this material.

Respiratory protection: Full-face vapor respirator may be required as backup to engineering controls when proper engineering controls are not in place to keep TLV and PEL limits below defined thresholds.

Control of environmental exposure: Prevent leakage or spillage if safe to do so. Do not let material enter drains.

Components with workplace control parameters:

Component(s): 2-Butoxyethanol; Phosphoric acid, trisodium salt
CAS No(s): 111-76-2; 7601-54-9
USA NIOSH (TWA/REL): 24 mg/m^3
USA ACGIH (TWA/TLV): 96 mg/m^3
USA OSHA - Table Z-1 Limits for Air Contaminants (TWA): 120 mg/m^3
USA OSHA Occupational Exposure Limits Table Z-1 Limits for Air Contaminants (TWA): 240 mg/m^3
USA Workplace Environmental Exposure Levels (WEEL/STEL): 5 mg/m^3

Biological occupational exposure limits:

Component: 2-Butoxyethanol
CAS-No: 111-76-2
Parameters: Butoxyacetic acid (BAA)

Biological Specimen: Urine
USA ACGIH Biological Exposure Indices: 200 mg/g

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Clear, green liquid
Physical State: Liquid
Odor Threshold: Not determined
Particle Size: Not determined
Spec Grav./Density: 1.020 g/ml (8.51 lbs/gal)
Viscosity: Not determined
Sat. Vap. Conc.: Not determined
Boiling Point: 100.0 °C (212 °F)
Flammability: (solid, gas): Not determined
Partition Coefficient: Not determined
Vapor Pressure: (mm Hg @ 25 °C): Not determined
pH: @ 1%: 12.7
Evap. Rate: (N-Butyl Acetate = 1): Not determined
Molecular weight: MIXTURE
Decomp Temp: Not determined
Odor: Pleasant
Molecular Formula: MIXTURE
Solubility: 100%
Softening Point: Not determined

28825 Ranney Parkway, Westlake, Ohio 44145 U.S.A.
telephone: 001 440 716 9962 • toll-free 001 888 327 7301
fax: 001 440 871 9964

e-mail: med@applied-inc.com
web-site: www.applied-inc.com

Percent Volatile: 2.88%
Heat Value: Not determined
Freezing/Melting Pt.: Not determined
Flash Point: DNA
Octanol: Not determined
Vapor Density: (air = 1): Not determined
VOC: 26 g/l
Bulk Density: Not determined
Auto·Ignition Temp: Not determined
UFL/LFL: Not determined

10. STABILITY AND REACTIVITY

Stability: Product is stable under normal conditions.
Conditions to Avoid: Incompatibilities, flames, ignition sources
Materials to Avoid: . Strong acids, strong bases, strong oxidizing agents, strong reducing agents, reactive metals (Zinc & Aluminum) and their alloys (Brass, etc.), Alkali metals, powdered metals, organic materials, chlorinated solvents, Phosphorous, Tin/Tin oxides, Lead, Copper and its alloys, Nickel, galvanized surfaces and Aldehydes.
Hazardous Decomposition: Carbon Oxides, Nitrogen Oxides (NOx), Phosphorous Oxides, Silicon Oxides and Sodium Oxides.
Hazardous Polymerization: Will not occur.

11. TOXICOLOGICAL INFORMATION

Component(s): 2-Butoxyethanol; Phosphoric acid, trisodium salt; Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-; Silicic acid (H2SiO3), disodium salt;
CAS No(s): 111-76-2; 7601-54-9; 9016-45-9; 6834-92-0

Acute Toxicity:
LD50 Oral - Rat: 470 mg/kg
LD50 Dermal - Rabbit: 220 mg/kg LD50 Intraperitoneal - Rat: 220 mg/kg LD50 Intravenous - Rat: 307 mg/kg LC50 Inhalation - Rat: 2175 mg/m^3 (4 h)

Skin Corrosion/Irritation: Rabbit skin - Corrosive (4 h).

Serious Eye Damage/Eye Irritation: Rabbit eyes - Severe eye irritation.

Respiratory or Skin Sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Germ Cell Mutagenicity: No data available.

Carcinogenicity:

This product is or contains components that are classifiable as to their carcinogenicity based on their IARC, ACGIH, NTP, or OSHA classification.

IARC: 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Butoxyethanol).
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential

28825 Ranney Parkway, Westlake, Ohio 44145 U.S.A.
telephone: 001 440 716 9962 • toll-free 001 888 327 7301
fax: 001 440 871 9964

e-mail: med@applied-inc.com
web-site: www.applied-inc.com

carcinogen by NTP.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive Toxicity: Oral - Rat: Effects on newborn (Live birth index, Weaning or lactation index). **Specific Target Organ Toxicity · Single Exposure:** Respiratory system - May cause respiratory irritation. **Specific Target Organ Toxicity · Repeated Exposure:** No data available.
Aspiration Hazard: No data available.

Additional Information:
Component: 2-Butoxyethanol; RTECS: KJ8575000
Component: Phosphoric acid, trisodium salt; RTECS: TC9490000
Component: Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-; RTECS: AX0247000
Component: Silicic acid (H2SiO3), disodium salt; RTECS: VV9275000

12. ECOLOGICAL INFORMATION

Component(s): 2-Butoxyethanol; Phosphoric acid, trisodium salt; Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy-; Silicic acid (H2SiO3), disodium salt
CAS No(s): 111-76-2; 7601-54-9; 9016-45-9; 6834-92-0

Toxicity:
Toxicity to fish:
LC50 - Lepomis macrochirus (Bluegill Sunfish): 1.0 mg/l (96 h) LC50 - Gambusia affinis (Western Mosquitofish): 28.5 mg/l (96 h)
Mortality LOEC - Pimephales promelas (Fathead Minnow): 2.0 mg/l (144 h) Mortality NOEC - Pimephales promelas (Fathead Minnow): 1.8 mg/l (144 h)

Toxicity to daphnia and other aquatic invertebrates:
EC50 - Daphnia magna (Water Flea): 12.2 - 17.0 mg/l (48 h) Mortality NOEC - Daphnia magna (Water Flea): 10.0 mg/l (144 h)
Mortality LOEC - Daphnia magna (Water Flea): 20.0 mg/l (144 h)

Toxicity to algae:
Growth Inhibition LOEC - Pseudokirchneriella subcapitata: 16.0 mg/l (96 h) Growth Inhibition NOEC - Pseudokirchneriella subcapitata: 8.0 mg/l (96 h)

Persistence and Degradability:
No data available.

Bioaccumulative potential:
No data available.

Mobility in Soil:
No data available.

Results of PBT and vPvB assessment:
Not required/conducted.

Other Adverse Effects:
An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.

28825 Ranney Parkway, Westlake, Ohio 44145 U.S.A.
telephone: 001 440 716 9962 • toll-free 001 888 327 7301
fax: 001 440 871 9964

e-mail: med@applied-inc.com
web-site: www.applied-inc.com

13. DISPOSAL CONSIDERATIONS

Product: Hazardous wastes shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution, release into the environment or damage to people and animals. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated Packaging: Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
Non-regulated material, liquid

IMDG
Non-regulated material, liquid

IATA
Non-regulated material, liquid

15. REGULATORY INFORMATION

COMPONENT / (CAS/PERC) / CODES
---
*2-Butoxyethanol (111762 1-5%) HAP, MASS, NJHS, OSHAWAC, PA, SARA311/312, SARA313, TSCA, TXAIR
*Phosphoric acid, trisodium salt (7601549 1-5%) CERCLA, CSWHS, MASS, NJHS, PA, SARA311/312, TSCA
*Poly(oxy-1,2-ethanediyl), .alpha.-(nonylphenyl)-.omega.-hydroxy- (9016459 1-5%) NJHS, PA, SARA311/312, TSCA
*Silicic acid (H2SiO3), disodium salt (6834920 1-5%) NJHS, PA, SARA311/312, TSCA

REGULATORY KEY DESCRIPTIONS

CERCLA = Superfund cleanup substance
CSWHS = Clean Water Act Hazardous substances
HAP = Hazardous Air Pollutants
MASS = MA Massachusetts Hazardous Substances List
NJHS = NJ Right-to-Know Hazardous Substances
OSHAWAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
SARA311/312 = SARA 311/312 Toxic Chemicals
SARA313 = SARA 313 Title III Toxic Chemicals
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

16. OTHER INFORMATION

Disclaimer:
The data in this Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material in any process. The information set forth herein is furnished free of charge and is based on technical data that Applied Home Healthcare Equipment believes to be reliable. It is intended for use by persons having technical skill and at their own discretion and risk. Since conditions of use are outside of Applied Home Healthcare Equipment's control, Applied Home Healthcare Equipment makes no warranties, expressed or implied, and assumes no liability in connection with any use of this information. Nothing herein is to be taken as a license to operate under, or a recommendation to infringe upon, any patents.