Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.13.2019

Revision date: 04.19.2024

Fonic Wash Low pH Citrus

SECTION 1: Identification

Product Identifier

Product Name: Fonic Wash Low pH Citrus

Product code: PR-174

Recommended Use of the Product and Restriction on Use

Relevant Identified Uses: Pre-soak Liquid Detergent

Uses Advised Against: NA

Reasons Why Uses Advised Against: Not determined or not applicable.

Manufacturer or Supplier Details

Manufacturer:

United States

JBS Industries
2726 Henkle Drive
Lebanon, Ohio 45036
513-228-2800
SBAETEN@JBSINDUSTRIES.COM

Emergency Telephone Number:

North America

CHEMTREC
800-424-9300 (24 hours)

SECTION 2: Hazard(s) Identification

GHS Classification:

Skin irritation, category 2
Serious eye damage, category 1
Skin sensitization, category 1
Carcinogenicity, category 1A

Label elements

Hazard Pictograms:

Signal Word: Danger

Hazard statements:

H315 Causes skin irritation
H318 Causes serious eye damage
H317 May cause an allergic skin reaction
H350 May cause cancer

Precautionary Statements:

P264 Wash contaminated skin thoroughly after handling
P280 Wear protective gloves/protective clothing/eye protection/face protection
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P272 Contaminated work clothing must not be allowed out of the workplace
P202 Do not handle until all safety precautions have been read and understood
P302+P352 IF ON SKIN: Wash with plenty of water for 15 minutes.
P362 Take off contaminated clothing and wash it before reuse
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P310 Immediately call a POISON CENTER/doctor if difficulty in breathing occurs.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention
P363 Wash contaminated clothing before reuse
P308+P313 IF exposed or concerned: Get medical advice/attention
P405 Store locked up
P501 Dispose of contents/container to qualified/license disposal company.

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 68584-22-5	Benzenesulfonic acid, C10-16-alkyl derivatives	1-30
CAS Number: 7664-38-2	Orthophosphoric Acid	<40
CAS Number: 84133-50-6	Alcohols, C12-14-secondary, ethoxylated	<30
CAS Number: 68439-46-3	Alcohols, C9-11, branched and linear, ethoxylated	<30
CAS Number: 8028-48-6	Orange, sweet, ext.	1-20
CAS Number: 7647-01-0	Hydrogen chloride	<12.95
CAS Number: 111-76-2	Ethylene Glycol Monobutyl Ether	<10
CAS Number: Proprietary	Ammonium Methyl Sulfate	<4.5
CAS Number: Proprietary	Fatty Alcohol Ethoxylate	<4.5
CAS Number: Proprietary	Nonionic Diluent	<4.5
CAS Number: 25322-68-3	Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	<0.9
CAS Number: 75-21-8	Ethylene oxide	<0.03

CAS Number: 123-91-1	1,4-dioxane	<0.03

Additional Information: None

SECTION 4: First Aid Measures

Description of First Aid Measures

General Notes:

Not determined or not applicable.

After Inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If experiencing respiratory symptoms, seek medical advice/attention.

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If symptoms develop or persist, seek medical advice/attention.

After Skin Contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

After Eye Contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

Immediately rinse eyes with plenty of gently flowing lukewarm water for 15 minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. Seek immediate medical attention, preferably from an ophthalmologist.

After Swallowing:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Most Important Symptoms and Effects, Both Acute and Delayed

Acute Symptoms and Effects:

Skin contact may result in redness, pain, burning and inflammation.

Eye contact may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision.

Dermal exposure may cause an allergic skin reaction. Symptoms may include irritation, redness, pain, rash, inflammation, itching, burning and dermatitis.

Delayed Symptoms and Effects:

Effects are dependent on exposure (dose, concentration, contact time).

Exposure may cause cancer. Effects are dependent on exposure (dose, concentration, contact time).

Immediate Medical Attention and Special Treatment

Specific Treatment:

In case of eye contact, seek prompt medical attention while rinsing is continued.

Notes for the Doctor:

Not determined or not applicable.

SECTION 5: Firefighting Measures

Extinguishing Media

Suitable Extinguishing Media:

Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable Extinguishing Media:

Do not use water jet.

Specific Hazards During Fire-Fighting:

Thermal decomposition may produce irritating/toxic fumes/gases.

Special Protective Equipment for Firefighters:

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

Special precautions:

Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental Release Measures

Personal Precautions, Protective Equipment, and Emergency Procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Do not get on skin, eyes or on clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling. Remove contaminated clothing and launder before reuse.

Respiratory protection may be necessary for spills greater than 5 gallons. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8.

Environmental Precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

Methods and Material for Containment and Cleaning Up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Avoid breathing dust, mist, fumes, vapors or spray. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

Reference to Other Sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and Storage

Precautions for Safe Handling:

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after

handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.
Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Do not get in eyes. Avoid contact with skin and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

Conditions for Safe Storage, Including Any Incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10).
Store in cool and dry location and out of direct sunlight. Store away from sources of heat or ignition. Store away from incompatible materials described in Section 10. Keep containers closed when not in use. Keep away from food and beverages. Protect from freezing and physical damage.

SECTION 8: Exposure Controls/Personal Protection

Only those substances with limit values have been included below.

Occupational Exposure Limit Values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
OSHA	Ethylene Glycol Monobutyl Ether	111-76-2	8-Hour TWA-PEL: 240 mg/m³ (50 ppm)
	Orthophosphoric Acid	7664-38-2	8-Hour TWA-PEL: 1 mg/m³ (OSHA Table Z-1 limits)
	Orthophosphoric Acid	7664-38-2	TWA: 1 mg/m³ (OSHA Table Z-1-A)
	Orthophosphoric Acid	7664-38-2	STEL: 3 mg/m³ (OSHA Table Z-1-A)
	Hydrogen chloride	7647-01-0	Ceiling Limit: 5 ppm (7 mg/m3)
	Hydrogen chloride	7647-01-0	PEL: 5 ppm (7 mg/m3)
	Ethylene oxide	75-21-8	8-Hour TWA-PEL: 1 ppm
	Ethylene oxide	75-21-8	15-Minute STEL: 5 ppm
	Ethylene oxide	75-21-8	8-Hour TWA: 0.5 ppm (Action level)
	1,4-dioxane	123-91-1	8-Hour TWA-PEL: 360 mg/m³ (100 ppm)
NIOSH	Ethylene Glycol Monobutyl Ether	111-76-2	IDLH: 700 ppm
	Ethylene Glycol Monobutyl Ether	111-76-2	REL-TWA: 24 mg/m³ (5 ppm [up to 10 hr])
	Orthophosphoric Acid	7664-38-2	REL-TWA: 1 mg/m³ (up to 10 hr)
	Orthophosphoric Acid	7664-38-2	15-Minute STEL: 3 mg/m³
	Orthophosphoric Acid	7664-38-2	IDLH: 1000 mg/m³
	Hydrogen chloride	7647-01-0	IDLH: 50 ppm
	Hydrogen chloride	7647-01-0	Ceiling Limit: 5 ppm (7 mg/m3)
	Ethylene oxide	75-21-8	IDLH: 800 ppm
	Ethylene oxide	75-21-8	Ceiling Limit: 9 mg/m³ (5 ppm [10-min/day])
	Ethylene oxide	75-21-8	REL-TWA: 0.18 mg/m³ (0.1 ppm [up to 10 hr])

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	1,4-dioxane	123-91-1	IDLH: 500 ppm
	1,4-dioxane	123-91-1	Ceiling Limit: 3.6 mg/m³ (1 ppm [30-min])
ACGIH	Ethylene Glycol Monobutyl Ether	111-76-2	8-Hour TWA: 20 ppm
	Orthophosphoric Acid	7664-38-2	8-Hour TWA: 1 mg/m³
	Orthophosphoric Acid	7664-38-2	15-Minute STEL: 3 mg/m³
	Hydrogen chloride	7647-01-0	Ceiling Limit: 2 ppm (TLV)
	Ethylene oxide	75-21-8	8-Hour TWA: 1 ppm
	1,4-dioxane	123-91-1	8-Hour TWA: 20 ppm
United States(California)	Orthophosphoric Acid	7664-38-2	8-Hour TWA-PEL: 1 mg/m³
	Orthophosphoric Acid	7664-38-2	15-Minute STEL: 3 mg/m³
	Ethylene Glycol Monobutyl Ether	111-76-2	8-Hour TWA-PEL: 97 mg/m³ (20 ppm)
	Hydrogen chloride	7647-01-0	PEL: 0.3 ppm (0.45 mg/m3)
	Hydrogen chloride	7647-01-0	Ceiling Limit: 2 ppm
	Ethylene oxide	75-21-8	15-Minute STEL: 5 ppm
	Ethylene oxide	75-21-8	8-Hour TWA-PEL: 2 mg/m³ (1 ppm)
	Ethylene oxide	75-21-8	8-Hour TWA: 0.5 ppm (Action level)
	1,4-dioxane	123-91-1	8-Hour TWA-PEL: 1 mg/m³ (0.28 ppm)
WEEL	Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	25322-68-3	8-Hour TWA: 10 mg/m³ (molecular weight >200 aerosol)

Biological Limit Values:

Country (Legal Basis)	Substance	Identifier	Determinant	Specimen	Sampling time	Permissible limits
ACGIH	Ethylene Glycol Monobutyl Ether	111-76-2	Butoxyacetic acid (with hydrolysis)	Creatinine in Urine	End of shift	200 mg/g
	Ethylene oxide	75-21-8	N-(2-hydroxyethyl)-valine (HEV) hemoglobin adducts	Hemoglobin adducts	Not critical	5000 pmol/g
	Ethylene oxide	75-21-8	S-(2-hydroxyethyl) mercapturic acid (HEMA)	Creatinine in urine	End of shift	5 µg/g
WEEL	Nonionic Diluent	Proprietary	Aerosol		TWA	10 mg/m3

Information on Monitoring Procedures:

Not determined or not applicable.

Appropriate Engineering Controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal Protection Equipment

Eye and Face Protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Use safety glasses with side shields or goggles. Consider the use of a face shield for splash protection. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and Body Protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. Full body protection should be worn. Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory Protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn. Use a positive pressure air supplied respirator if there is any potential for an uncontrolled release, exposure levels are not known, or any other circumstances where air purifying respirators may not provide adequate protection.

General Hygienic Measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

Handle in accordance with good industrial hygiene and safety measures. Wash hands and face after handling chemical products. Wash hands before eating, drinking and smoking. Wash hands at the end of the workday. Appropriate techniques should be applied to remove contaminated clothing and shoes. Wash contaminated clothing before reuse.

SECTION 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance	Tan Liquid
Odor	Citrus
Odor threshold	Not determined or not available.
pH	2

Melting point/freezing point	Not determined or not available.
Initial boiling point/range	Not determined or not available.
Flash point (closed cup)	Not determined or not available.
Evaporation rate	Not determined or not available.
Flammability (solid, gas)	Not determined or not available.
Upper flammability/explosive limit	Not determined or not available.
Lower flammability/explosive limit	Not determined or not available.
Vapor pressure	Not determined or not available.
Vapor density	Not determined or not available.
Density	Not determined or not available.
Relative density	Not determined or not available.
Solubilities	Not determined or not available.
Partition coefficient (n-octanol/water)	Not determined or not available.
Auto/Self-ignition temperature	Not determined or not available.
Decomposition temperature	Not determined or not available.
Dynamic viscosity	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Explosive properties	Not determined or not available.
Oxidizing properties	Not determined or not available.

SECTION 10: Stability and Reactivity

Reactivity:
Not reactive under recommended handling and storage conditions.

Chemical Stability:
Stable under recommended handling and storage conditions.

Possibility of Hazardous Reactions:
Hazardous reactions are not anticipated under recommended conditions of handling and storage.

Conditions to Avoid:
Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible Materials:
None known.

Hazardous Decomposition Products:
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

Acute Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Route	Result
Ethylene Glycol Monobutyl Ether	Dermal ATE	LD50 Rabbit: 1100 mg/kg
	Oral ATE	LD50 Rat: 1200 mg/kg (Annex VI to the CLP)
	Inhalation ATE	LC50 Rat: 3 mg/L (4 hr [Vapor] Annex VI to the CLP)

Name	Route	Result
Benzenesulfonic acid, C10-16-alkyl derivatives	inhalation	LC50 Rat: >1.9 mg/L (4 h [aerosol])
	Dermal ATE	LD50 Rabbit: 1100 mg/kg
	Oral ATE	LD50 Rat: 500 mg/kg
Orthophosphoric Acid	inhalation	LC50 Rat: 422.25 mg/L (4 hr [aerosol])
	oral	LD50 Rat: 1530 mg/kg
	dermal	LD50 Rabbit: 2740 mg/kg
Orange, sweet, ext.	oral	LD50 Rat: >5000 mg/kg
	dermal	LD50 Rabbit: >5000 mg/kg
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	dermal	LD50 Rat: >2000 mg/kg
	oral	LD50 Rat: >2000 mg/kg
Hydrogen chloride	Inhalation ATE	LC50 Rat: 700 ppmV (4 hr [gas])
Ethylene oxide	Inhalation ATE	LC50 Rat: 700 ppmV (4 hr (Gas))
	Oral ATE	LD50 Rat: 100 mg/kg
1,4-dioxane	oral	LD50 Rat: 5150 mg/kg
	dermal	LD50 Rabbit: 7600 mg/kg
	inhalation	LC50 Rat: 9158 ppmV (4 hr - Vapor)
Alcohols, C9-11, branched and linear, ethoxylated	oral	LD50 Rat: 3488 mg/kg
	dermal	LD50 Rabbit: > 2000 mg/kg
	inhalation	LC50 Rat: >1.6 mg/m³ (4 hr [aerosol])

Skin Corrosion/Irritation

Assessment:

Causes skin irritation.

Product Data:

No data available.

Substance Data:

Name	Result
Orthophosphoric Acid	Causes severe skin burns.
Ethylene Glycol Monobutyl Ether	Causes skin irritation.
Benzenesulfonic acid, C10-16-alkyl derivatives	Causes severe skins burns.
Orange, sweet, ext.	Causes skin irritation.
Alcohols, C12-14-secondary, ethoxylated	Causes skin irritation.
Hydrogen chloride	Causes severe skin burns.
Ethylene oxide	Causes severe skin burns.

Serious Eye Damage/Irritation

Assessment:

Causes serious eye damage.

Product Data:

No data available.

Substance Data:

Name	Result
Orthophosphoric Acid	Causes serious eye damage.
Ethylene Glycol Monobutyl Ether	Causes serious eye irritation.
Benzenesulfonic acid, C10-16-alkyl derivatives	Causes serious eye damage.
Alcohols, C12-14-secondary, ethoxylated	Causes serious eye damage.
Hydrogen chloride	Causes serious eye damage.
Ethylene oxide	Causes serious eye damage.
1,4-dioxane	Causes serious eye irritation.
Alcohols, C9-11, branched and linear, ethoxylated	Causes serious eye damage.

Respiratory or Skin Sensitization

Assessment:

May cause an allergic skin reaction.

Product Data:

No data available.

Substance Data:

Name	Result
Orange, sweet, ext.	May cause an allergic skin reaction.

Carcinogenicity

Assessment:

May cause cancer.

Product Data: No data available.

Substance Data:

Name	Species	Result
Ethylene oxide		May cause cancer.
1,4-dioxane		May cause cancer. 1,4-dioxane is characterized as "likely to be carcinogenic to humans." This characterization is based on the following findings: (1) inadequate evidence of carcinogenicity in humans, and (2) sufficient evidence in animals (i.e., hepatic tumors in multiple species [three strains of rats, two strains of mouse, and in guinea pigs] mesotheliomas of the peritoneum, mammary, and nasal tumors have also been observed in rats following 2 years of oral exposure to 1,4- dioxane). U.S. Environmental Protection Agency's Integrated Risk Information System (IRIS).

International Agency for Research on Cancer (IARC):

Name	Classification
Orthophosphoric Acid	Not Applicable
Ethylene Glycol Monobutyl Ether	Group 3
Benzenesulfonic acid, C10-16-alkyl derivatives	Not Applicable

Name	Classification
Orange, sweet, ext.	Not Applicable
Alcohols, C12-14-secondary, ethoxylated	Not Applicable
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	Not Applicable
Hydrogen chloride	Group 3
Ethylene oxide	Group 1
1,4-dioxane	Group 2B
Alcohols, C9-11, branched and linear, ethoxylated	Not Applicable

National Toxicology Program (NTP):

Name	Classification
Orthophosphoric Acid	Not Applicable
Ethylene Glycol Monobutyl Ether	Not Applicable
Benzenesulfonic acid, C10-16-alkyl derivatives	Not Applicable
Orange, sweet, ext.	Not Applicable
Alcohols, C12-14-secondary, ethoxylated	Not Applicable
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	Not Applicable
Hydrogen chloride	Not Applicable
Ethylene oxide	Known to be human carcinogens
1,4-dioxane	Reasonably anticipated to be human carcinogens
Alcohols, C9-11, branched and linear, ethoxylated	Not Applicable

OSHA Carcinogens: Not applicable

Germ Cell Mutagenicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Ethylene oxide	May cause genetic defects.

Reproductive Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Ethylene oxide	May damage fertility. Suspected of damaging the unborn child.

Specific Target Organ Toxicity (Single Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Hydrogen chloride	May cause respiratory irritation.
Ethylene oxide	May cause respiratory irritation.
	May cause drowsiness or dizziness.
1,4-dioxane	May cause respiratory irritation.

Specific Target Organ Toxicity (Repeated Exposure)

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Ethylene oxide	Studies on the effects of Ethylene oxide have concluded not only neurotoxic symptoms in humans, but also measured effects on nerve conduction velocities indicative of sensorimotor neuropathy, and axonal degeneration observed in nerve biopsies of exposed workers.

Aspiration toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data:

No data available.

Substance Data:

Name	Result
Orange, sweet, ext.	Maybe fatal if swallowed and enters airways.

Information on Likely Routes of Exposure:

No data available.

Symptoms Related to the Physical, Chemical, and Toxicological Characteristics:

No data available.

Other Information:

No data available.

SECTION 12: Ecological Information

Acute (Short-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Result
Ethylene Glycol Monobutyl Ether	Aquatic Invertebrates EC50 Daphnia magna: 1550 mg/L (48 hr [mobility])
	Fish LC50 Oncorhynchus mykiss: 1474 mg/L (96 hr)
	Aquatic Plants EC50 Raphidocelis subcapitata: 1840 mg/L (72 hr [Growth rate])
Orthophosphoric Acid	Aquatic Invertebrates EC50 Daphnia magna: > 100 mg/L (48 hr [immobilization])
	Aquatic Plants EC50 Desmodesmus subspicatus: > 100 mg/L (72 hr [growth rate])
	Fish LC50 Oryzias latipes: 100 mg/L (96 hr)
Orange, sweet, ext.	Aquatic Plants EC50 Desmodesmus subspicatus: 150 mg/L (72 hr [EL50-growth rate])
	Aquatic Invertebrates EC50 Daphnia magna: 1.1 mg/L (48 hr [EL50-mobility])
	Fish LC50 Danio rerio: 5.65 mg/L (96 hr [LL50])
Benzenesulfonic acid, C10-16-alkyl derivatives	Aquatic Invertebrates EC50 Daphnia magna: >1000 mg/L (48hr [mobility] Read-across)
	Aquatic Plants EC50 Raphidocelis subcapitata: >1000 mg/L (72 hr [growth rate] Read-across)
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	Fish LC50 Poecilia reticulata: > 100 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: > 100 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Desmodesmus subspicatus: >100 mg/L (72 hr [growth rate, Read-across substance data])
Ethylene oxide	Aquatic Plants EC50 Pseudokirchneriella subcapitata: 240 mg/L (96 h, read-across substance data)
	Aquatic Invertebrates LC50 Daphnia magna: 212 mg/L (48 h)
	Fish LC50 Pimephales promelas: 84 mg/L (96 h)
1,4-dioxane	Fish LC50 Pimephales promelas: 9850 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >1000 mg/L (48 hr)
	Aquatic Plants EC50 Pseudokirchneriella subcapitata: >1000 mg/L (72 hr)
Alcohols, C9-11, branched and linear, ethoxylated	Fish LC50 Oncorhynchus mykiss: 5 - 7 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 2.5 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Raphidocelis subcapitata: 1.4 mg/L (96 hr [cell number])

Chronic (Long-Term) Toxicity

Assessment: Based on available data, the classification criteria are not met.

Product Data: No data available.

Substance Data:

Name	Result
Ethylene Glycol Monobutyl Ether	Fish NOEC Danio rerio: > 100 mg/L (21 d [markers for endocrine disruptive effects])
	Aquatic Invertebrates NOEC Daphnia magna: 100 mg/L (21 d [reproduction])
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	Fish NOEC Salt water fish: 13,671.586 mg/L (28 d [mortality])
	Aquatic Invertebrates NOEC Daphnia magna: 17,475.27 mg/L (21 d [immobilisation, Read-across substance data])

Name	Result
1,4-dioxane	Fish NOEC Pimephales promelas: 145 mg/L (32 d)
	Aquatic Invertebrates NOEC Daphnia magna: 1000 mg/L (21 d)
Alcohols, C9-11, branched and linear, ethoxylated	Fish NOEC Pimephales promelas: 0.28 mg/L (30 d [mortality, Read-across substance data])
	Aquatic Invertebrates NOEC Daphnia magna: 0.77 mg/L (21 d [reproduction, Read-across substance data])

Persistence and Degradability

Product Data: No data available.

Substance Data:

Name	Result
Benzenesulfonic acid, C10-16-alkyl derivatives	Under test conditions no biodegradation observed.
Orthophosphoric Acid	Persistence assessment based on biodegradability is not relevant for inorganic compounds such as this substance.
Orange, sweet, ext.	The substance is readily biodegradable.75% degradation in water, measured by O2 consumption, after 28 days.
Ethylene Glycol Monobutyl Ether	The substance is readily biodegradable. 90.4% degradation, measured by CO2 evolution, after 28 days.
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	The substance is readily biodegradable. 74.85% degradation in water, measured by O2 consumption, after 28 days.
Hydrogen chloride	Persistence assessment based on biodegradability is not relevant for inorganic compounds such as this substance.
Ethylene oxide	Readily biodegradable (96% degradation after 28 days, measured by TOC removal).
1,4-dioxane	Not readily biodegradable (< 10 % degradation after 29 days, measured by CO2 evolution).
Alcohols, C9-11, branched and linear, ethoxylated	The substance is readily biodegradable. 72% degradation in water, measured by inorganic C analysis, after 28 days (Read-across substance data)..

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
Ethylene Glycol Monobutyl Ether	The substance is not expected to bioaccumulate (log Kow = 0.83).
Orthophosphoric Acid	Bioaccumulation assessment using a classic BCF assessment is not considered relevant for inorganic compounds such as this substance.
Orange, sweet, ext.	The substance has the potential to bioaccumulate (BCF: 261 - 395 L/kg, basis- whole body w.w., QSAR substance data).
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	The substance is not expected to bioaccumulate (log Pow=0.2 at 30 °C & BCF= 3.162 L/kg at 25 °C, basis- whole body w.w.).
Hydrogen chloride	Bioaccumulation assessment using a classic BCF assessment is not considered relevant for inorganic compounds such as this substance.
Ethylene oxide	Low potential for bioaccumulation (logKow = -0.3).

Name	Result
1,4-dioxane	Does not accumulate in aquatic organisms (mean BCF: 0.45).
Alcohols, C9-11, branched and linear, ethoxylated	The substance has the potential to bioaccumulate (log Pow=3.3 - 3.73 & BCF= 237 L/kg, Read-across substance data).

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
Orthophosphoric Acid	Mobility in soil assessment based on KOC/Kd values are not relevant for inorganic compounds such as this substance.
Orange, sweet, ext.	The parameter is not tested because the substance and its relevant degradation products decompose rapidly.
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	The substance is mobile, therefore adsorption to soil is not expected (log Koc= 1.857 dimensionless at 25 °C).
Hydrogen chloride	Mobility in soil assessment based on KOC/Kd values are not relevant for inorganic compounds such as this substance.
1,4-dioxane	Significant adsorption to solid soil phase is not expected (calculated log Koc: 0.51 at 25 °C).
Alcohols, C9-11, branched and linear, ethoxylated	The substance is moderately mobile, therefore, moderate adsorption to soil is expected (log Koc=2.7 - 3.5 at 25 °C, QSAR substance data).

Results of PBT and vPvB assessment

Product Data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance Data:

PBT assessment:

Orange, sweet, ext.	The substance is not PBT.
Ethylene Glycol Monobutyl Ether	The substance is not PBT.
Orthophosphoric Acid	PBT assessment does not apply to inorganic compounds such as this substance.
Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	The substance is not PBT.
Hydrogen chloride	PBT assessment does not apply to inorganic compounds such as this substance.
Ethylene oxide	This substance is not PBT.
1,4-dioxane	Under assessment as Persistent, Bioaccumulative and Toxic (PBT list).
Alcohols, C9-11, branched and linear, ethoxylated	The substance is not PBT.

vPvB assessment:

Orange, sweet, ext.	The substance is not vPvB.
Ethylene Glycol Monobutyl Ether	The substance is not vPvB.
Orthophosphoric Acid	vPvB assessment does not apply to inorganic compounds such as this substance.

Poly(oxy-1,2-ethanediyl),α-hydro-ω-hydroxy- Ethane-1,2-diol, ethoxylated	The substance is not vPvB.
Hydrogen chloride	vPvB assessment does not apply to inorganic compounds such as this substance.
Ethylene oxide	This substance is not vPvB.
1,4-dioxane	This substance is not vPvB.
Alcohols, C9-11, branched and linear, ethoxylated	The substance is not vPvB.

Other Adverse Effects: No data available.

SECTION 13: Disposal Considerations

Disposal Methods:

Contact a license professional to dispose of all unused product. It is the responsibility of the waste generator to properly dispose of all waste materials.

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport Information

United States Transportation of Dangerous Goods (49 CFR DOT)

UN Number	1760
UN Proper Shipping Name	Corrosive Liquid, N.O.S. Hydrochloric Acid, Phosphoric acid
UN Transport Hazard Class(es)	8 
Packing Group	III
Environmental Hazards	None
Special Precautions for User	None
Additional Information	55

International Maritime Dangerous Goods (IMDG)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None
Special Precautions for User	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN Number	Not regulated
UN Proper Shipping Name	Not regulated
UN Transport Hazard Class(es)	None
Packing Group	None
Environmental Hazards	None

Special Precautions for User	None

SECTION 15: Regulatory Information

United States Regulations

Inventory Listing (TSCA): All ingredients are listed-active or exempt.

Significant New Use Rule (TSCA Section 5): None of the ingredients are listed.

Export Notification under TSCA Section 12(b): None of the ingredients are listed.

SARA Section 302 Extremely Hazardous Substances:

7647-01-0	Hydrogen chloride	Listed
75-21-8	Ethylene oxide	Listed

SARA Section 313 Toxic Chemicals:

111-76-2	Ethylene Glycol Monobutyl Ether	Listed
7647-01-0	Hydrogen chloride	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

CERCLA:

7664-38-2	Orthophosphoric Acid	Listed	5000 lbs
111-76-2	Ethylene Glycol Monobutyl Ether	Listed	N/A
7647-01-0	Hydrogen chloride	Listed	5000 lbs
75-21-8	Ethylene oxide	Listed	10 lbs
123-91-1	1,4-dioxane	Listed	100 lbs

RCRA:

75-21-8	Ethylene oxide	Listed	U115
123-91-1	1,4-dioxane	Listed	U108

Section 112(r) of the Clean Air Act (CAA):

75-21-8	Ethylene oxide	Listed

Massachusetts Right to Know:

7664-38-2	Orthophosphoric Acid	Listed
111-76-2	Ethylene Glycol Monobutyl Ether	Listed
7647-01-0	Hydrogen chloride	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

New Jersey Right to Know:

7664-38-2	Orthophosphoric Acid	Listed
111-76-2	Ethylene Glycol Monobutyl Ether	Listed
7647-01-0	Hydrogen chloride	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

New York Right to Know:

7664-38-2	Orthophosphoric Acid	Listed
111-76-2	Ethylene Glycol Monobutyl Ether	Listed
7647-01-0	Hydrogen chloride	Listed

75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

Pennsylvania Right to Know:

7664-38-2	Orthophosphoric Acid	Listed
111-76-2	Ethylene Glycol Monobutyl Ether	Listed
7647-01-0	Hydrogen chloride	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

California Proposition 65:

⚠**WARNING:** This product can expose you to chemicals including Strong inorganic acid mists containing sulfuric acid and 1,4-dioxane which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

⚠**WARNING:** This product can expose you to Ethylene oxide; which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

Additional information: Not determined.

SECTION 16: Other Information

Abbreviations and Acronyms: None

Disclaimer:

This product has been classified in accordance with OSHA HCS 2012 guidelines. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

NFPA: 0-0-0

HMIS: 0-0-0

Initial Preparation Date: 03.13.2019

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End of Safety Data Sheet