Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 04.10.2026

Tri-Foam Polish Glow (Mast)

SECTION 1: Identification

Product Identifier

Product Name: Tri-Foam Polish Glow (Mast)
Product code: MS-455-B

Recommended Use of the Product and Restriction on Use

Relevant Identified Uses: High Pressure Soap, Foaming Detergent
Uses Advised Against: NA
Reasons Why Uses Advised Against: Not determined or not applicable.

Manufacturer or Supplier Details

Manufacturer:
United States
Mast Solutions
430 North Franklin Street
Lancaster, PA 17602
631-255-9869
jonk@mastsolutionsinc.com
www.mastsolutionsinc.com

Emergency Telephone Number:

North America
CHEMTREC
800-424-9300 (24 hours)

SECTION 2: Hazard(s) Identification

GHS Classification:

Skin corrosion, category 1A
Serious eye damage, category 1
Carcinogenicity, category 1A
Specific target organ toxicity - single exposure, category 3, respiratory tract irritation
Specific target organ toxicity - single exposure, category 3, narcotic effects

Label elements

Hazard Pictograms:

Signal Word: Danger

Hazard statements:

H314 Causes severe skin burns and eye damage
H318 Causes serious eye damage
H350 May cause cancer.
H335 May cause respiratory irritation

H336 May cause drowsiness or dizziness

Precautionary Statements:

P202 Do not handle until all safety precautions have been read and understood
P280 Wear protective gloves/protective clothing/eye protection/face protection
P271 Use only outdoors or in a well-ventilated area
P260 Do not breathe dust/fume/gas/mist/vapors/spray
P264 Wash hands thoroughly after handling
P308+P313 IF exposed or concerned: Get medical advice/attention
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
P363 Wash contaminated clothing 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
P405 Store locked up
P403+P233 Store in a well-ventilated place. Keep container tightly closed
P501 It is the responsibility of the waste generator to characterize all waste materials according to applicable regulatory entities.

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 52-51-7	Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	<20
CAS Number: 1310-73-2	Sodium hydroxide	<20
CAS Number: 68584-22-5	Benzenesulfonic acid, C10-16-alkyl derivatives	<20
CAS Number: 9004-82-4	2-dodecoxyethyl hydrogen sulfate	<15
CAS Number: 111-76-2	Ethylene Glycol Monobutyl Ether	<20
CAS Number: 68131-39-5	Alcohols, C12-15, ethoxylated	<15
CAS Number: 75-21-8	Ethylene oxide	<0.018
CAS Number: 123-91-1	1,4-dioxane	<0.018

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.

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:

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:

Exposure to skin may result in redness, pain, burning, inflammation and tissue damage. Exposure to eyes may result in irritation, redness, pain, inflammation, itching, burning, tearing, corneal damage and loss of vision. Exposure via inhalation may result in cough, sore throat, burning sensation and shortness of breath. Exposure via ingestion may result in burns of the mouth and throat, abdominal pain, burning sensation in the throat and chest, nausea, vomiting, shock or collapse.

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:

If respiratory symptoms persist, seek medical attention.

Overexposure via inhalation requires urgent medical treatment.

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

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

In case of ingestion, seek prompt medical attention.

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). 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.

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. 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.

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).

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
ACGIH	Sodium hydroxide	1310-73-2	Ceiling Limit: 2 mg/m³
	Ethylene Glycol Monobutyl Ether	111-76-2	8-Hour TWA: 20 ppm
	Ethylene oxide	75-21-8	8-Hour TWA: 1 ppm
	1,4-dioxane	123-91-1	8-Hour TWA: 20 ppm
OSHA	Sodium hydroxide	1310-73-2	8-Hour TWA-PEL: 2 mg/m³
	Ethylene Glycol Monobutyl Ether	111-76-2	8-Hour TWA-PEL: 240 mg/m³ (50 ppm)

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Ethylene oxide	75-21-8	8-Hour TWA: 1 ppm
	1,4-dioxane	123-91-1	8-Hour TWA-PEL: 360 mg/m³ (100 ppm)
NIOSH	Sodium hydroxide	1310-73-2	IDLH: 10 mg/m³
	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])
	Sodium hydroxide	1310-73-2	Ceiling Limit: 2 mg/m³
	Ethylene oxide	75-21-8	8-Hour TWA: 0.1 ppm (0.18 mg/m3)
	Ethylene oxide	75-21-8	IDLH: 800 ppm
	Ethylene oxide	75-21-8	Ceiling Limit: 5 ppm (9 mg/m3)
	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])
United States(California)	Sodium hydroxide	1310-73-2	Ceiling Limit: 2 mg/m³
	Ethylene Glycol Monobutyl Ether	111-76-2	8-Hour TWA-PEL: 97 mg/m³ (20 ppm)
	Ethylene oxide	75-21-8	15-Minute STEL: 5 ppm
	1,4-dioxane	123-91-1	8-Hour TWA-PEL: 1 mg/m³ (0.28 ppm)

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	S-(2-Hydroxyethyl)mercapturic acid (HEMA)	creatinine urine	End of Shift	5 µg/g

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).

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).

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. 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.

SECTION 9: Physical and Chemical Properties

Information on Basic Physical and Chemical Properties

Appearance	Liquid
Odor	Std.
Odor threshold	Not determined or not available.
pH	7
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:

Avoid generation of aerosols and mists, extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

Incompatible Materials:

None known.

Hazardous Decomposition Products:

None known.

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
Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	dermal	LD50 Rat: 1600 mg/kg
	oral	LD50 Rat: 193 mg/kg
	inhalation	LC50 Rat: > 0.588 mg/L (4 hr [aerosol])
Ethylene Glycol Monobutyl Ether	Dermal ATE	LD50 Rat: >2000 mg/kg
	Oral ATE	LD50 Rat: 1200 mg/kg
	Inhalation ATE	LC50 Rat: 3 mg/L (4 hr [Vapor])
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
Alcohols, C12-15, ethoxylated	oral	LD50 Rat: >2000 mg/kg
	dermal	LD50 Rabbit: 2500 mg/kg
Sodium hydroxide	oral	LD50 Rat: 325 mg/kg
	dermal	LD50 Rabbit: 1350 mg/kg
2-dodecoxyethyl hydrogen sulfate	oral	LD50 Rat: 1600 mg/kg
Ethylene oxide	inhalation	LC50 Rat: 660 ppmV (4 hr [Gas])
	oral	LD50 Rat: 270 mg/kg
1,4-dioxane	oral	LD50 Rat: 5150 mg/kg
	dermal	LD50 Rabbit: 7600 mg/kg

Skin Corrosion/Irritation

Assessment:

Causes severe skin burns and eye damage.

Product Data:

No data available.

Substance Data:

Name	Result
Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	Causes skin irritation.

Name	Result
Sodium hydroxide	Causes severe skin burns.
Ethylene Glycol Monobutyl Ether	Causes skin irritation.
2-dodecoxyethyl hydrogen sulfate	Causes skin irritation.
Benzenesulfonic acid, C10-16-alkyl derivatives	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
Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	Causes serious eye damage.
Sodium hydroxide	Causes serious eye damage.
Ethylene Glycol Monobutyl Ether	Causes serious eye irritation.
2-dodecoxyethyl hydrogen sulfate	Causes serious eye irritation.
Benzenesulfonic acid, C10-16-alkyl derivatives	Causes serious eye damage.
Alcohols, C12-15, ethoxylated	Causes serious eye damage.
Ethylene oxide	Causes serious eye damage
1,4-dioxane	Causes serious eye irritation.

Respiratory or Skin Sensitization

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

Product Data:

No data available.

Substance Data: No data available.

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.

International Agency for Research on Cancer (IARC):

Name	Classification
Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	Not Applicable

Name	Classification
Sodium hydroxide	Not Applicable
Ethylene Glycol Monobutyl Ether	Group 3
2-dodecoxyethyl hydrogen sulfate	Not Applicable
Alcohols, C12-15, ethoxylated	Not Applicable
Benzenesulfonic acid, C10-16-alkyl derivatives	Not Applicable
Ethylene oxide	Group 1
1,4-dioxane	Group 2B

National Toxicology Program (NTP):

Name	Classification
Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	Not Applicable
Sodium hydroxide	Not Applicable
Ethylene Glycol Monobutyl Ether	Not Applicable
2-dodecoxyethyl hydrogen sulfate	Not Applicable
Alcohols, C12-15, ethoxylated	Not Applicable
Benzenesulfonic acid, C10-16-alkyl derivatives	Not Applicable
Ethylene oxide	Known to be human carcinogens
1,4-dioxane	Reasonably anticipated to be human carcinogens

OSHA Carcinogens:

Ingredient Name	CAS	OSHA Carcinogens Status
Ethylene oxide	75-21-8	Yes

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 or the unborn child.

Specific Target Organ Toxicity (Single Exposure)

Assessment:
May cause respiratory irritation.
May cause drowsiness or dizziness.

Product Data:
No data available.

Substance Data:

Name	Result
Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	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	Cause damage to organs through prolonged or repeated exposure.

Aspiration toxicity

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

Product Data:
No data available.

Substance Data: No data available.

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
Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	Aquatic Invertebrates EC50 Daphnia magna: 0.69 mg/L (48 hr [mortality])
	Aquatic Plants EC50 Desmodesmus subspicatus: 0.026 mg/L (72 hr [growth rate])
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])

Name	Result
Alcohols, C12-15, ethoxylated	Aquatic Invertebrates EC50 Acartia tonsa: 0.88 mg/L (48 hr [mortality])
	Aquatic Plants EC50 Raphidocelis subcapitata: 0.031 mg/L (72 hr [growth rate])
	Fish LC50 Pimephales promelas: 0.628 mg/L (96 hr [QSAR substance data])
Sodium hydroxide	Aquatic Invertebrates EC50 Ceriodaphnia sp.: 40.4 mg/L (48 hr [immobilization])
	Fish LC50 Fish: 35 - 189 mg/L (96 hr)
Benzenesulfonic acid, C10-16-alkyl derivatives	Aquatic Invertebrates EC50 Daphnia magna: >1000 mg/L (48hr [mobility; Read-across substance data])
	Aquatic Plants EC50 Raphidocelis subcapitata: >1000 mg/L (72 hr [growth rate; Read-across substance data])
	Fish LC50 Cyprinodon variegatus: >10,000 mg/L (96 hr [Read-across substance data])
Ethylene oxide	Aquatic Plants EC50 Raphidocelis subcapitata: 240 mg/L (96 hr [growth rate, Read-across substance data])
	Aquatic Invertebrates EC50 Daphnia magna: 350 mg/L (48 hr [mobility, Read-across substance data])
	Fish LC50 Oncorhynchus mykiss: 52 mg/L (96 hr [Read-across substance data])
1,4-dioxane	Fish LC50 Pimephales promelas: 9850 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: >1000 mg/L (48 hr [mobility])
	Aquatic Plants EC50 Pseudokirchneriella subcapitata: >1000 mg/L (72 hr [growth rate])

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])
Alcohols, C12-15, ethoxylated	Aquatic Invertebrates NOEC Daphnia magna: 0.036 mg/L (21 d [mortality])
	Fish EC10 Pimephales promelas: 0.265 mg/L (28 d [reproduction, QSAR substance data])
Benzenesulfonic acid, C10-16-alkyl derivatives	Aquatic Plants NOEC Raphidocelis subcapitata: 1000 mg/L (72 hr [growth rate; Read-across substance data])
1,4-dioxane	Fish NOEC Pimephales promelas: 145 mg/L (32 d [mortality])
	Aquatic Invertebrates NOEC Daphnia magna: 1000 mg/L (21 d [reproduction])
	Aquatic Plants NOEC Pseudokirchneriella subcapitata: 1000 mg/L (72 hr [growth rate])

Persistence and Degradability

Product Data: No data available.

Substance Data:

Name	Result
Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	The substance is readily biodegradable. 70 - 80% degradation in water, measured by CO2 evolution, after 28 days.
Sodium hydroxide	Persistence assessment based on biodegradability is not relevant for inorganic compounds such as this substance.
Ethylene Glycol Monobutyl Ether	The substance is readily biodegradable. 90.4% degradation, measured by CO2 evolution, after 28 days.
Alcohols, C12-15, ethoxylated	Standard biodegradability studies are not applicable to UVCB substances.
Benzenesulfonic acid, C10-16-alkyl derivatives	The substance is not biodegradable. 8% degradation in water, measured by COD, after 28 days (Read-across substance data).
Ethylene oxide	The substance is readily biodegradable. 107% degradation in water, measured by O2 consumption, after 28 days.
1,4-dioxane	The substance is not readily biodegradable in water. 1% degradation in water, measured by CO2 evolution, after 60 days.

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	The substance is not expected to bioaccumulate (BCF=3.9 L/kg basis-whole body w.w., QSAR substance data).
Sodium hydroxide	Bioaccumulation assessment using a classic BCF assessment is not considered relevant for inorganic compounds such as this substance.
Ethylene Glycol Monobutyl Ether	The substance is not expected to bioaccumulate (log Kow = 0.83).
Alcohols, C12-15, ethoxylated	Standard bioaccumulation studies are not applicable to UVCB substances.
Benzenesulfonic acid, C10-16-alkyl derivatives	The substance has the potential to bioaccumulate significantly (log Pow: 18.05 at 25 °C, QSAR substance data).
Ethylene oxide	The substance is not expected to bioaccumulate (log Pow: -0.3 at 25 °C).
1,4-dioxane	The substance is not expected to bioaccumulate (BCF: 0.3 - 0.7).

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	The substance is highly mobile; therefore, adsorption to soil is not expected (Koc= 1 L/kg at 25 °C, QSAR substance data).
Sodium hydroxide	Mobility in soil assessment based on KOC/Kd values are not relevant for inorganic compounds such as this substance.
Alcohols, C12-15, ethoxylated	Standard adsorption/desorption studies are not applicable to UVCB substances.
Benzenesulfonic acid, C10-16-alkyl derivatives	The substance is immobile, therefore, there is a significant potential for adsorption to soil and sediment (Koc: >100,000, Read-across substance data).
Ethylene oxide	The substance is highly mobile, therefore, adsorption to soil and sediment is not expected (log Koc: 0.51 dimensionless, QSAR substance data).
1,4-dioxane	The substance is highly mobile, therefore, adsorption to soil and sediment is not expected (Log Koc: 0.42 L/Kg at 25 °C).

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:

Alcohols, C12-15, ethoxylated	The substance is not PBT.
Ethylene Glycol Monobutyl Ether	The substance is not PBT.
Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	The substance is not PBT.
Sodium hydroxide	PBT assessment does not apply to inorganic compounds such as this substance.
Benzenesulfonic acid, C10-16-alkyl derivatives	Standard PBT studies are not applicable to UVCB substances.
Ethylene oxide	The substance is not PBT.
1,4-dioxane	The substance is not PBT.

vPvB assessment:

Alcohols, C12-15, ethoxylated	The substance is not vPvB.
Ethylene Glycol Monobutyl Ether	The substance is not vPvB.
Bronopol (INN) 2-bromo-2-nitropropane-1,3-diol	The substance is not vPvB.
Sodium hydroxide	vPvB assessment does not apply to inorganic compounds such as this substance.
Benzenesulfonic acid, C10-16-alkyl derivatives	Standard vBvB studies are not applicable to UVCB substances.
Ethylene oxide	The substance is not vPvB.
1,4-dioxane	The substance is not vPvB.

Other Adverse Effects: No data available.

SECTION 13: Disposal Considerations

Disposal Methods:

It is the responsibility of the waste generator to characterize all waste material according to regulatory entities.

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport Information

United States Transportation of Dangerous Goods (49 CFR DOT)

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 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:

75-21-8	Ethylene oxide	Listed

SARA Section 313 Toxic Chemicals:

111-76-2	Ethylene Glycol Monobutyl Ether	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

CERCLA:

1310-73-2	Sodium hydroxide	Listed	1000 lb
111-76-2	Ethylene Glycol Monobutyl Ether	Listed	N/A
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:

1310-73-2	Sodium hydroxide	Listed
111-76-2	Ethylene Glycol Monobutyl Ether	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

New Jersey Right to Know:

1310-73-2	Sodium hydroxide	Listed
111-76-2	Ethylene Glycol Monobutyl Ether	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

New York Right to Know:

1310-73-2	Sodium hydroxide	Listed
111-76-2	Ethylene Glycol Monobutyl Ether	Listed
75-21-8	Ethylene oxide	Listed
123-91-1	1,4-dioxane	Listed

Pennsylvania Right to Know:

1310-73-2	Sodium hydroxide	Listed
111-76-2	Ethylene Glycol Monobutyl Ether	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: 04.10.2026

End of Safety Data Sheet