



Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 1 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

SECTION 1: Identification

Product Identifier

Product Name: Storm Hyper Ultra

Product code: PR-115

Recommended Use of the Product and Restriction on Use

Relevant Identified Uses: For commercial car wash use only

Uses Advised Against: Do not use in handwashing applications

Reasons Why Uses Advised Against: This product is corrosive and causes severe eye damage.

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 corrosion, category 1A

Serious eye damage, category 1

Skin sensitization, category 1

Label elements

Hazard Pictograms:



Signal Word: Danger

Hazard statements:

H314 Causes severe skin burns and eye damage

H318 Causes serious eye damage

H317 May cause an allergic skin reaction

Precautionary Statements:

P260 Do not breathe dust/fume/gas/mist/vapors/spray

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 2 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

P264 Wash hands 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
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
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P310 Immediately call a POISON CENTER/doctor/...
P321 Specific treatment (see ... on this label)
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P302+P352 IF ON SKIN: Wash with plenty of water/ ...
P333+P313 If skin irritation or rash occurs: Get medical advice/attention
P405 Store locked up
P501 Dispose of contents/container to...

Hazards Not Otherwise Classified: None

SECTION 3: Composition/Information on Ingredients

Identification	Name	Weight %
CAS Number: 5989-27-5	d-Limonene	<10
CAS Number: 7732-18-5	Water	<100
CAS Number: 1310-58-3	Potassium hydroxide	<43.4
CAS Number: 527-07-1	Sodium gluconate	<40
CAS Number: Proprietary	Ammonium Methyl Sulfate	<22.5
CAS Number: Proprietary	Fatty Alcohol Ethoxylate	<22.5
CAS Number: Proprietary	Nonionic Diluent	<22.5
CAS Number: 68515-73-1	D-Glucopyranose, oligomers, decyl octyl glycosides	<21
CAS Number: 61789-40-0	1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	<15.5
CAS Number: 5064-31-3	Trisodium nitrilotriacetate	0.1-0.5
CAS Number: 111-76-2	2-Butoxyethanol	<7.959992

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 3 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

CAS Number: 1300-72-7	Sodium Xylenesulfonate	<5
CAS Number: 56-81-5	Glycerol	<1.5
CAS Number: 7757-82-6	Sodium sulphate	<0.3
CAS Number: 50-00-0	Formaldehyde	<0.045
CAS Number: 79-43-6	Dichloroacetic acid	<0.045
CAS Number: 107-21-1	Ethane-1,2-diol	<0.0072

Additional Information: None

SECTION 4: First Aid Measures

Description of First Aid Measures

General Notes:

Show this Safety Data Sheet to the doctor in attendance.

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:

Treatment is urgent. Seek emergency medical treatment. Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse.

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.

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.

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. Seek immediate medical attention.

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

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 4 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

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.

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).

Immediate Medical Attention and Special Treatment

Specific 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:

Treat symptomatically.

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.

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:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 5 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

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).

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). Prevent skin contact. Do not get in eyes. Use only with adequate ventilation. Do not add water to the corrosive product. If it is necessary to mix a corrosive product with water, do so slowly adding the corrosive to cold water, in small amounts, and stir frequently. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use. Keep only in original packaging. 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 and away from exit paths. Store in a corrosion-resistant container with a resistant inner liner. Inspect containers and storage area regularly for signs of leak and damage. Store containers at a convenient height for handling, below eye level if possible. High shelving increases the risk of dropping containers, personal injury and exposure. Ensure that appropriate fire fighting and spill-clean up equipment is readily available. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Store separately. 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	Potassium hydroxide	1310-58-3	Ceiling Limit: 2 mg/m ³
	Formaldehyde	50-00-0	15-Minute STEL: 0.3 ppm
	Formaldehyde	50-00-0	8-Hour TWA: 0.1 ppm
	Dichloroacetic acid	79-43-6	8-Hour TWA: 0.5 ppm
	Ethane-1,2-diol	107-21-1	8-Hour TWA: 25 ppm (vapor fraction)
	Ethane-1,2-diol	107-21-1	15-Minute STEL: 50 ppm (vapor fraction)
	Ethane-1,2-diol	107-21-1	15-Minute STEL: 10 mg/m ³ (aerosol only, inhalable fraction)
	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 20 ppm

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 6 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Glycerol	56-81-5	8-Hour TWA: 10 mg/m ³ (Particles, insoluble or poorly soluble, not otherwise specified, inhalable)
	Glycerol	56-81-5	8-Hour TWA: 5 mg/m ³ (Particles, insoluble or poorly soluble, not otherwise specified, respirable)
NIOSH	Potassium hydroxide	1310-58-3	Ceiling Limit: 2 mg/m ³
	Formaldehyde	50-00-0	REL-TWA: 0.016 ppm (up to 10 hr)
	Formaldehyde	50-00-0	Ceiling Limit: 0.1 ppm (15 min)
	Formaldehyde	50-00-0	IDLH: 20 ppm
	2-Butoxyethanol	111-76-2	IDLH: 700 ppm
	2-Butoxyethanol	111-76-2	REL-TWA: 24 mg/m ³ (5 ppm [up to 10 hr])
United States(California)	Potassium hydroxide	1310-58-3	Ceiling Limit: 2 mg/m ³
	Formaldehyde	50-00-0	15-Minute STEL: 2 ppm
	Formaldehyde	50-00-0	8-Hour TWA-PEL: 0.75 ppm
	Formaldehyde	50-00-0	8-Hour TWA: 0.5 ppm (Action level)
	Ethane-1,2-diol	107-21-1	Ceiling Limit: 100 mg/m ³ (40 ppm)
	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 97 mg/m ³ (20 ppm)
	2-Butoxyethanol	111-76-2	REL: 4700 ug/m ³ (Acute inhalation)
	2-Butoxyethanol	111-76-2	REL: 164 ug/m ³ (8-hour Inhalation)
	2-Butoxyethanol	111-76-2	REL: 82 ug/m ³ (Chronic inhalation)
	Glycerol	56-81-5	8-Hour TWA-PEL: 10 mg/m ³ (Particulates not otherwise regulated, total dust)
	Glycerol	56-81-5	8-Hour TWA-PEL: 5 mg/m ³ (Particulates not otherwise regulated, respirable fraction)
WEEL	d-Limonene	5989-27-5	8-Hour TWA: 30 ppm
OSHA	Formaldehyde	50-00-0	8-Hour TWA-PEL: 0.75 ppm
	Formaldehyde	50-00-0	15-Minute STEL: 2 ppm
	Formaldehyde	50-00-0	8-Hour TWA-PEL: 0.5 ppm (Action level)
	Ethane-1,2-diol	107-21-1	Ceiling Limit: 125 mg/m ³ (50 ppm)
	2-Butoxyethanol	111-76-2	8-Hour TWA-PEL: 240 mg/m ³ (50 ppm [Table Z-1])
	2-Butoxyethanol	111-76-2	8-Hour TWA: 120 mg/m ³ (25 ppm [Table Z-1-A])
	Glycerol	56-81-5	8-Hour TWA-PEL: 15 mg/m ³ (Mist, total)

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 7 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Glycerol	56-81-5	8-Hour TWA-PEL: 5 mg/m ³ (Mist, respirable fraction)

Biological Limit Values:

Country (Legal Basis)	Substance	Identifier	Determinant	Specimen	Sampling time	Permissible limits
ACGIH	2-Butoxyethanol	111-76-2	Butoxyacetic acid (with hydrolysis)	Creatinine in Urine	End of shift	200 mg/g
WEEL	Nonionic Diluent	Proprietary	Aerosol		TWA	10 mg/m ³

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:

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).

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. 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).

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.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 8 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

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	Not determined or not available.
Odor	Not determined or not available.
Odor threshold	Not determined or not available.
pH	Not determined or not available.
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:

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 9 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

Do not mix with strong acids.

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
Potassium hydroxide	oral	LD50 Rat: 273 mg/kg
d-Limonene	oral	LD50 Rat: >2000 mg/kg
	dermal	LD50 Rabbit: > 5000 mg/kg
Formaldehyde	oral	LD50 Rat: 100 mg/kg
	inhalation	LC50 Rat: <463 ppmV (4 hr (vapor))
	dermal	LD50 Rabbit: 270 mg/kg
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	oral	LD50 Rat: 4900 mg/kg
	dermal	LD50 Rat: > 2000 mg/kg
Dichloroacetic acid	dermal	LD50 Rabbit: 797 mg/kg
	oral	LD50 Rat: 2820 mg/kg
D-Glucopyranose, oligomers, decyl octyl glycosides	oral	LD50 Rat: > 2000 mg/kg
	dermal	LD50 Rabbit: > 2000 mg/kg
Trisodium nitrilotriacetate	oral	LD50 Rat: 1100 mg/kg
	dermal	LD50 Rabbit: >2000 mg/kg
	inhalation	LC50 Rat: >5 mg/L (4 hr - Aerosol)
Sodium sulphate	oral	LD50 Rat: > 2000 mg/kg
	inhalation	LC50 Rat: > 2.4 mg/L (4 hr - Dust)
Ethane-1,2-diol	dermal	LD50 Mouse: > 3500 mg/kg
	Oral ATE	LD50 Rat: 500 mg/kg (Converted acute toxicity point estimate)
2-Butoxyethanol	dermal	LD50 Rabbit: 220 mg/kg
	inhalation	LC50 Rat: 450 ppmV (4 h [Vapor])
	Oral ATE	LD50 Rat: 1200 mg/kg (Annex VI to the CLP)
	oral	LD50 Rat: 470 mg/kg
Sodium Xylenesulfonate	dermal	LD50 Rabbit: >= 2000 mg/kg
	oral	LD50 Rat: >= 3346 mg/kg
Glycerol	oral	LD50 Rat: 27,200 mg/kg
	dermal	LD50 Guinea Pig: 56,750 mg/kg
	inhalation	LC50 Rat: > 5850 mg/m ³ (4 hr [Aerosol])

Skin Corrosion/Irritation

Assessment:

Causes severe skin burns and eye damage.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 10 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

Product Data:

No data available.

Substance Data:

Name	Result
Potassium hydroxide	Causes severe skin burns.
d-Limonene	Causes skin irritation.
Formaldehyde	Causes severe skin burns.
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Causes skin irritation.
Dichloroacetic acid	Causes severe skin burns.
2-Butoxyethanol	Causes skin irritation.

Serious Eye Damage/Irritation

Assessment:

Causes serious eye damage.

Product Data:

No data available.

Substance Data:

Name	Result
Potassium hydroxide	Causes serious eye damage.
Formaldehyde	Causes serious eye damage.
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Causes serious eye irritation.
Dichloroacetic acid	Causes serious eye damage.
D-Glucopyranose, oligomers, decyl octyl glycosides	Causes serious eye damage.
Trisodium nitrilotriacetate	Causes serious eye irritation.
Sodium Xylenesulfonate	Causes serious eye irritation.
2-Butoxyethanol	Causes serious eye irritation.

Respiratory or Skin Sensitization

Assessment:

May cause an allergic skin reaction.

Product Data:

No data available.

Substance Data:

Name	Result
d-Limonene	May cause an allergic skin reaction.
Formaldehyde	May cause an allergic skin reaction.

Carcinogenicity

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

Product Data: No data available.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 11 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

Substance Data:

Name	Species	Result
Formaldehyde		May cause cancer.
Trisodium nitrilotriacetate		Suspected of causing cancer.

International Agency for Research on Cancer (IARC):

Name	Classification
Potassium hydroxide	Not Applicable
Sodium gluconate	Not Applicable
d-Limonene	Group 3
Water	Not Applicable
Formaldehyde	Group 1
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Not Applicable
Dichloroacetic acid	Group 2B
D-Glucopyranose, oligomers, decyl octyl glycosides	Not Applicable
Trisodium nitrilotriacetate	Group 2B
Sodium sulphate	Not Applicable
Ethane-1,2-diol	Not Applicable
2-Butoxyethanol	Group 3
Sodium Xylenesulfonate	Not Applicable
Glycerol	Not Applicable

National Toxicology Program (NTP):

Name	Classification
Potassium hydroxide	Not Applicable
Sodium gluconate	Not Applicable
d-Limonene	Not Applicable
Water	Not Applicable
Formaldehyde	Known to be human carcinogens
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Not Applicable
Dichloroacetic acid	Reasonably anticipated to be human carcinogens
D-Glucopyranose, oligomers, decyl octyl glycosides	Not Applicable
Trisodium nitrilotriacetate	Not Applicable
Sodium sulphate	Not Applicable
Ethane-1,2-diol	Not Applicable
2-Butoxyethanol	Not Applicable
Sodium Xylenesulfonate	Not Applicable

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 12 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

Name	Classification
Glycerol	Not Applicable

OSHA Carcinogens:

Ingredient Name	CAS	OSHA Carcinogens Status
Formaldehyde	50-00-0	Yes

Germ Cell Mutagenicity

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

Product Data:

No data available.

Substance Data:

Name	Result
Formaldehyde	Suspected of causing genetic defects.

Reproductive Toxicity

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

Product Data:

No data available.

Substance Data: No data available.

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
Formaldehyde	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
Ethane-1,2-diol	May cause damage to Kidneys through prolonged or repeated Oral 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.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 13 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

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
d-Limonene	Fish LC50 Pimephales promelas: 0.72 mg/L (96 Hr)
	Aquatic Invertebrates EC50 Daphnia magna: 0.307 mg/L (48 Hr)
	Aquatic Plants EC50 Pseudokirchneriella subcapitata: 0.32 mg/L (72 Hr)
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Fish LC50 Danio rerio: 2 mg/L (96 hr)
	Aquatic Invertebrates EC50 Daphnia magna: 6.4 mg/L (48 hr)
Dichloroacetic acid	Aquatic Invertebrates EC50 Daphnia magna: 106 mg/L (24 hr)
	Fish LC50 Marine water fish: >2000 mg/L (96 hr)
	Aquatic Plants EC50 Marine water algae: 148.2 mg/L (72 hr)
D-Glucopyranose, oligomers, decyl octyl glycosides	Fish LC50 Danio rerio: 100.81 mg/L (96 hr)
	Aquatic Invertebrates EC50 Acartia tonsa: 31.62 mg/L (48 hr)
	Aquatic Plants EC50 Desmodosmus subspicatus: 27.22 mg/L (72 hr)
Trisodium nitrilotriacetate	Fish LC50 Pimephales promelas: 103 mg/L (96 hr)
	Aquatic Plants EC50 Desmodosmus subspicatus: >100 mg/L (72 hr)
Ethane-1,2-diol	Aquatic Plants EC50 Green Algae: 479 mg/L (72 h)
	Aquatic Invertebrates EC50 Daphnia magna: 13,900 mg/L (48 h)
	Fish LC50 Pimephales promelas: 72,860 mg/L (96 h)
2-Butoxyethanol	Aquatic Invertebrates EC50 Daphnia magna: 1,550 mg/L (48 h [mobility])
	Fish LC50 Oncorhynchus mykiss: 1,474 mg/L (96 h [mortality])
Sodium sulphate	Fish LC50 Lepomis macrochirus: 4380 mg/L (96 hr)
	Aquatic Invertebrates LC50 Americamysis bahia: 1.85 - 2.66 mg/L (48 hr)
Potassium hydroxide	Fish LC50 Gambusia affinis: 80 mg/L (96 hr)
Sodium Xylenesulfonate	Aquatic Plants EC50 Selenastrum capricornutum: >=758 mg/L (96 hr [growth rate; read-across])
	Fish LC50 Oncorhynchus mykiss: >=1580 mg/L (96 hr [read-across])
	Aquatic Invertebrates EC50 Daphnia magna: >1020 mg/L (48 hr [mobility; read-across])
Glycerol	Fish LC50 Pimephales promelas: 885 mg/L (96 hr)
	Aquatic Invertebrates LC50 Daphnia magna: 1955 mg/L (48 hr)

Chronic (Long-Term) Toxicity

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

Product Data: No data available.

Substance Data:

Name	Result
d-Limonene	Fish EC10 Pimephales promelas: 0.37 mg/L (8 days)
	Aquatic Invertebrates NOEC Daphnia magna: 0.080 mg/L (21 days)

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 14 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

Name	Result
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Aquatic Invertebrates NOEC Daphnia magna: 0.9 mg/L (21 d)
D-Glucopyranose, oligomers, decyl octyl glycosides	Fish NOEC Danio rerio: 1 mg/L (28 d [read-across])
	Aquatic Invertebrates NOEC Daphnia magna: 1 mg/L (21 d [read-across])
Trisodium nitrilotriacetate	Fish NOEC Pimephales promelas: >54 mg/L (32 weeks)
Ethane-1,2-diol	Fish NOEC Pimephales promelas: 2629 mg/L (7 d)
	Aquatic Invertebrates EC50 Daphnia magna: 690 mg/L (16 d)
2-Butoxyethanol	Fish NOEC Danio rerio: > 100 mg/L (21 d)
	Aquatic Invertebrates NOEC Daphnia magna: 100 mg/L (21 d [reproduction])
Sodium sulphate	Aquatic Invertebrates EC50 Ceriodaphnia dubia: 1698 mg/L (7 d [reproduction])
Glycerol	Aquatic Plants EC50 Freshwater algae: 2900 mg/L (8 d)

Persistence and Degradability

Product Data: No data available.

Substance Data:

Name	Result
Potassium hydroxide	The study on degradability does not need to be conducted as the substance is inorganic.
d-Limonene	Readily biodegradable in water (71.4% degradation in 28 days).
Formaldehyde	Readily biodegradable (99% degradation after 28 days).
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Readily biodegradable in water (50% degradation after 1 day; >90% degradation after 5 days).
Dichloroacetic acid	This substance is readily biodegradable.
D-Glucopyranose, oligomers, decyl octyl glycosides	Readily biodegradable in water (100% degradation [DOC removal] after 28 days).
Ethane-1,2-diol	Readily biodegradable (90-100% degradation after 10 days).
2-Butoxyethanol	Readily biodegradable (90.4% degradation after 28 days, measured by CO2 evolution).
Trisodium nitrilotriacetate	Substance is readily biodegradable. >95% degradation in water, measured by DOC removal, after 28 days.
Sodium Xylenesulfonate	The substance is readily biodegradable. 83 - 85% degradation, measured by CO2 evolution, after 28 days.
Glycerol	The substance is readily biodegradable. 94% degradation, measured by DOC removal, after 28 days.

Bioaccumulative Potential

Product Data: No data available.

Substance Data:

Name	Result
Potassium hydroxide	Not expected to bioaccumulate, as it completely dissociates in water.
d-Limonene	The calculated Bioaccumulation Factor (BCF) is 864.8 L/kg wet/wet.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 15 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

Name	Result
Formaldehyde	Accumulation in aquatic organisms is not to be expected.
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Substance is not expected to bioaccumulate significantly (estimated BCF: 70.79 L/kg).
Dichloroacetic acid	This substance has low potential for bioaccumulation.
Trisodium nitrilotriacetate	Not expected to bioaccumulate (log Kow = -10.08).
Ethane-1,2-diol	Bioaccumulation in organisms is not to be expected (log Kow: -1.36).
2-Butoxyethanol	Not expected to bioaccumulate (log Kow = 0.83).
Sodium sulphate	This substance is not expected to bioaccumulate. It dissociates in water and the sulfate ion is easily reduced in the sulfur cycle.
Glycerol	The substance is not expected to bioaccumulate (log Kow = -1.76).

Mobility in Soil

Product Data: No data available.

Substance Data:

Name	Result
Potassium hydroxide	Low potential for adsorption. If emitted to surface water, sorption to sediment will be negligible.
d-Limonene	Slightly Mobile (the Koc of d-limonene predicted from log Kow is 6324 L/kg).
Formaldehyde	Adsorption to solid soil phase is possible.
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Substance is mobile to moderately mobile (experimental log Koc: 1.812 dimensionless; calculated Koc: 648 L/kg); therefore, moderate adsorption to soil can be expected.
Dichloroacetic acid	This substance will not adsorb at all to soils or sediments should these environmental compartments be exposed to it.
D-Glucopyranose, oligomers, decyl octyl glycosides	Substance is expected to be mobile (log Koc: 1.7); therefore, adsorption to soil is not expected.
Trisodium nitrilotriacetate	Trisodium nitrilotriacetate (Na ₃ NTA) is a highly water-soluble organic substance.
Ethane-1,2-diol	Highly mobile (Koc: 1 L/kg).
Sodium sulphate	This substance is not expected to adsorb onto soil or sediment. It dissociates in water and the sulfate ion is easily reduced in the sulfur cycle.
Glycerol	Given that this substance is a common biochemical present in most if not all species, there is no reason to believe that it wouldn't be rapidly degraded in soil.

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:

Potassium hydroxide	The substance is not PBT.
d-Limonene	This substance is not PBT.

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 16 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

Formaldehyde	Not a PBT substance.
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Substance is not PBT.
Dichloroacetic acid	This substance is not PBT.
D-Glucopyranose, oligomers, decyl octyl glycosides	Substance is not PBT.
Trisodium nitrilotriacetate	This substance is not PBT.
Sodium sulphate	PBT assessment does not apply to inorganic substances.
Ethane-1,2-diol	The substance is not PBT.
2-Butoxyethanol	This substance is not PBT.
Sodium Xylenesulfonate	The substance is not PBT.
Glycerol	The substance is not PBT.

vPvB assessment:

Potassium hydroxide	The substance is not vPvB.
d-Limonene	This substance is not vPvB.
Formaldehyde	Not a vPvB substance.
1-Propanaminium, 3-amino-N-(carboxymethyl)-N,N-dimethyl-, N-coco acyl derivs., hydroxides, inner salts	Substance is not vPvB.
Dichloroacetic acid	This substance is not vPvB.
D-Glucopyranose, oligomers, decyl octyl glycosides	Substance is not vPvB.
Trisodium nitrilotriacetate	This substance is not vPvB.
Sodium sulphate	vPvB assessment does not apply to inorganic substances.
Ethane-1,2-diol	The substance is not vPvB.
2-Butoxyethanol	This substance is not vPvB.
Sodium Xylenesulfonate	The substance is not vPvB.
Glycerol	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 properly characterize all waste materials according to applicable regulatory entities

Contaminated packages:

Not determined or not applicable.

SECTION 14: Transport Information

United States Transportation of Dangerous Goods (49 CFR DOT)

UN Number	UN1814
UN Proper Shipping Name	Potassium Hydroxide Solutions, 8, UN1814, PGII

Safety Data Sheet


According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022


Page 17 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

UN Transport Hazard Class(es)	8	
Packing Group	II	
Environmental Hazards	None	
Special Precautions for User	None	

International Maritime Dangerous Goods (IMDG)

UN Number	UN1814	
UN Proper Shipping Name	Potassium Hydroxide Solutions, 8, UN1814, PGI	
UN Transport Hazard Class(es)	8	
Packing Group	II	
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:

50-00-0	Formaldehyde	Listed
---------	--------------	--------

SARA Section 313 Toxic Chemicals:

50-00-0	Formaldehyde	Listed
107-21-1	Ethane-1,2-diol	Listed
111-76-2	2-Butoxyethanol	Listed

CERCLA:

1310-58-3	Potassium hydroxide	Listed	1000 lb
50-00-0	Formaldehyde	Listed	100 lb
107-21-1	Ethane-1,2-diol	Listed	5000 lb
111-76-2	2-Butoxyethanol	Listed	N/A

RCRA:

50-00-0	Formaldehyde	Listed	U122
---------	--------------	--------	------

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 18 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

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

50-00-0	Formaldehyde	Listed
---------	--------------	--------

Massachusetts Right to Know:

1310-58-3	Potassium hydroxide	Listed
50-00-0	Formaldehyde	Listed
5064-31-3	Trisodium nitrilotriacetate	Listed
7757-82-6	Sodium sulphate	Listed
107-21-1	Ethane-1,2-diol	Listed
111-76-2	2-Butoxyethanol	Listed
56-81-5	Glycerol	Listed

New Jersey Right to Know:

1310-58-3	Potassium hydroxide	Listed
5989-27-5	d-Limonene	Listed
50-00-0	Formaldehyde	Listed
79-43-6	Dichloroacetic acid	Listed
107-21-1	Ethane-1,2-diol	Listed
111-76-2	2-Butoxyethanol	Listed
56-81-5	Glycerol	Listed

New York Right to Know:

1310-58-3	Potassium hydroxide	Listed
5989-27-5	d-Limonene	Listed
50-00-0	Formaldehyde	Listed
79-43-6	Dichloroacetic acid	Listed
7757-82-6	Sodium sulphate	Listed
107-21-1	Ethane-1,2-diol	Listed
111-76-2	2-Butoxyethanol	Listed

Pennsylvania Right to Know:

1310-58-3	Potassium hydroxide	Listed
50-00-0	Formaldehyde	Listed
7757-82-6	Sodium sulphate	Listed
107-21-1	Ethane-1,2-diol	Listed
111-76-2	2-Butoxyethanol	Listed
56-81-5	Glycerol	Listed

California Proposition 65:

⚠️WARNING: This product can expose you to chemicals including Formaldehyde and Nitrilotriacetic acid, trisodium salt; which are known to the State of California to cause cancer; and Ethane-1,2-diol, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

⚠️WARNING: This product can expose you to Dichloroacetic acid; 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

Safety Data Sheet

According to OSHA Hazard Communication Standard, 29 CFR 1910.1200

Initial Preparation Date: 03.04.2022

Page 19 of 19

Revision date: 12.22.2022

Storm Hyper Ultra

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: 03.04.2022

Revision date: 12.22.2022

End of Safety Data Sheet