

Safety Data Sheet

Hydrion® pH and sanitizer test kits since 1934

Issue Date: 15-Feb-2012

Revision Date: 12-Aug-2019

Version 2

1. IDENTIFICATION

Product identifier Product Name	HYDRION BUFFER pH-4.00
Other means of identification SDS #	MEL-001
Recommended use of the chemic	al and restrictions on use
Recommended Use	For preparation of buffer standards in distilled water.
Details of the supplier of the safe Supplier Address MICRO ESSENTIAL LABORATOR PO BOX 100824, 4224 AVENUE H BROOKLYN, NY 11210	Y, INC
Emergency telephone number Company Phone Number Emergency Telephone	PHONE: 718-338-3618 FAX: 718-692-4491 (8:00AM TO 4:00PM EASTERN STANDARD TIME) INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)
	2. HAZARDS IDENTIFICATION

Appearance White to off white Granules, crystals or powder

Physical state Solid

Odor Odorless

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Potassium Biphthalate	877-24-7	100

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret. **

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash affected areas thoroughly with soap and water for at least 15 minutes. Get medical attention if necessary.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Get medical attention if necessary.

Ingestion Drink plenty of water. Do not induce vomiting without medical advice. Get medical attention if necessary.

Most important symptoms and effects, both acute and delayed

SymptomsDust may be irritating to eyes. Prolonged skin contact may cause skin irritation or allergic
reaction. Ingestion can irritate stomach and cause mouth burns. Prolonged exposure by
inhalation may cause irritation of the nose, throat and respiratory tract. Prolonged exposure
to BULK POWDER may cause irritation to the eyes, skin and respiratory system.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Non-flammable.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not release runoff from fire control methods to sewers or waterways.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required. Keep unnecessary people away, isolate hazard area and deny entry. Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only.
Environmental precautions	
Environmental precautions	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.
Methods and material for contain	ment and cleaning up
Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	For small spills: Wipe up product and rinse affected area with water. For slightly larger spills: Carefully sweep or scoop up spilled material into a large beaker and dissolve with water. Adjust to a pH between 6 and 9 with an alkali, such as soda ash or sodium bicarbonate. Flush reacted material to the drain with a large excess of water if permitted by local regulations. Decontaminate the area of the spill with a soap solution. For very large spills: dike far ahead of liquid spill for later disposal in suitable containers.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	 Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. The following precautions pertain only to BULK POWDER handling: Ventilation: Use adequate general or local ventilation to keep fume and dust levels as low as possible Respiratory Protection: Use NIOSH approved dust respirator when handling bulk powder Eye Protection: Chemical splash goggles with side shields when handling bulk powder Gloves: Natural rubber, butyl neoprene or equivalent. Wear full cover clothing when handling bulk powder. Do not breathe dust. Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling. Do NOT take internally.
Conditions for safe storage, includ	ing any incompatibilities
Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Avoid excessive temperatures & high humidity.
Incompatible Materials	Hazardous reaction in aqueous solution may occur with chlorine, hypochlorous acid, hypochlorites, cyanides or sulfides.
8. EX	POSURE CONTROLS/PERSONAL PROTECTION
Exposure Guidelines	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies
Appropriate engineering controls	
Engineering Controls	Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers. Local exhaust ventilation recommended.
Individual protection measures, su	ch as personal protective equipment
Eye/Face Protection	Refer to 29 CFR 1910.133 for eye and face protection regulations. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with, contact lenses.
Skin and Body Protection	Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact.
Respiratory Protection	Seek professional advice prior to respirator selection and use. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. WARNING! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.
General Hygiene Consideration	s Handle in accordance with good industrial hygiene and safety practice. Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance	Solid White to off white Granules, crystals o powder	or Odor	Odorless
Color	White to off white	Odor Threshold	Not determined
Property pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation Rate Flammability (Solid, Gas) Flammability Limit in Air Upper flammability or explosive limits Lower flammability or explosive limits Vapor Pressure	Values 4.00 Not determined 100 °C / 212 °F Non-flammable Not determined Not determined Not determined Not determined	<u>Remarks • Method</u>	
Vapor Density Relative Density	Not determined ~1	@ 60°F (ASTM D 1298)	
Water Solubility Solubility in other solvents Partition Coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic Viscosity Explosive Properties Oxidizing Properties	Miscible in water Not determined Not determined Not determined Not determined Not determined Not determined Not determined Not determined		
Other information			

Molecular weight

Potassium Biphthalate 204.2 grams

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

See below - Incompatible Materials.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible materials

Hazardous reaction in aqueous solution may occur with chlorine, hypochlorous acid, hypochlorites, cyanides or sulfides.

Hazardous decomposition products

May emit toxic fumes of phosphorous oxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	Do not inhale.
Ingestion	May be harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium Biphthalate	> 3200 mg/kg (Rat)	-	-
877-24-7			

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document. Oral LD50 3,203.20 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mo<u>bility</u>

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.
	14. TRANSPORT INFORMATION
<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<u>DOT</u>	Not regulated
IATA_	Not regulated
IMDG_	Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Potassium Biphthalate	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

16. OTHER INFORMATION

<u>NFPA</u> HMIS	Health Hazards 0 Health Hazards 0	Flammability 0 Flammability 0	Instability 0 Physical hazards 0	Special Hazards Not determined Personal Protection Not determined
Issue Date: Revision Date: Revision Note:	15-Feb- 12-Aug- Regulati			

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release 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 or in any process, unless specified in the text.

End of Safety Data Sheet

MICRO ESSENTIAL

Safety Data Sheet

Hydrion® pH and sanitizer test kits since 1934

Issue Date: 15-Feb-2012

Revision Date: 12-Aug-2019

Version 2

1. IDENTIFICATION Product identifier **Product Name** HYDRION BUFFER pH 7.00 Other means of identification SDS # **MEL-002** Recommended use of the chemical and restrictions on use **Recommended Use** For preparation of buffer standards in distilled water. Details of the supplier of the safety data sheet Supplier Address MICRO ESSENTIAL LABORATORY, INC PO BOX 100824, 4224 AVENUE H BROOKLYN, NY 11210 Emergency telephone number **Company Phone Number** PHONE: 718-338-3618 FAX: 718-692-4491 (8:00AM TO 4:00PM EASTERN STANDARD TIME) **Emergency Telephone** INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance White to off white Granules, crystals or powder

Physical state Solid

Odor Odorless

Classification

This chemical does not meet the hazardous criteria set forth by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200). However, this Safety Data Sheet (SDS) contains valuable information critical to the safe handling and proper use of this product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Sodium Phosphate	7558-79-4	60-70

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret. **

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.
Skin Contact	Wash affected areas thoroughly with soap and water for at least 15 minutes. Get medical attention if necessary.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Get medical attention if necessary.

Ingestion Drink plenty of water. Do not induce vomiting without medical advice. Get medical attention if necessary.

Most important symptoms and effects, both acute and delayed

SymptomsDust may be irritating to eyes. Prolonged skin contact may cause skin irritation or allergic
reaction. Ingestion can irritate stomach and cause mouth burns. Prolonged exposure by
inhalation may cause irritation of the nose, throat and respiratory tract. Prolonged exposure
to BULK POWDER may cause irritation to the eyes, skin and respiratory system.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Non-flammable.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not release runoff from fire control methods to sewers or waterways.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required. Keep unnecessary people away, isolate hazard area and deny entry. Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only.
Environmental precautions	
Environmental precautions	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.
Methods and material for containme	ent and cleaning up
Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	Sweep up, place in a bag, and hold for waste disposal. If permitted by local regulations and authorities dispose of as normal refuse. However, if NOT permitted to do so then waste must be disposed of according to RCRA regulations. Wash area with soap and water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	 Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. The following precautions pertain only to BULK POWDER handling: Ventilation: Use adequate general or local ventilation to keep fume and dust levels as low as possible Respiratory Protection: Use NIOSH approved dust respirator when handling bulk powder Eye Protection: Chemical splash goggles with side shields when handling bulk powder Gloves: Natural rubber, butyl neoprene or equivalent. Wear full cover clothing when handling bulk powder. Do not breathe dust. Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling. Do NOT take internally. 		
Conditions for safe storage, includ	ng any incompatibilities		
Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Avoid excessive temperatures & high humidity.		
Incompatible Materials	Hazardous reaction in aqueous solution may occur with chlorine, hypochlorous acid, hypochlorites, cyanides or sulfides.		
8. EX	POSURE CONTROLS/PERSONAL PROTECTION		
Exposure Guidelines	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies		
Appropriate engineering controls			
Engineering Controls	Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers. Local exhaust ventilation recommended.		
Individual protection measures, su	ch as personal protective equipment		
Eye/Face Protection	Refer to 29 CFR 1910.133 for eye and face protection regulations. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with, contact lenses.		
Skin and Body Protection	Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact.		
Respiratory Protection	Seek professional advice prior to respirator selection and use. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. WARNING! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.		
General Hygiene Consideration	s Handle in accordance with good industrial hygiene and safety practice. Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.		

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance	Solid White to off white Granules, crystals or	⁻ Odor	Odorless
Color	powder White to off white	Odor Threshold	Not determined
Property pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation Rate Flammability (Solid, Gas) Flammability Limit in Air Upper flammability or explosive limits Lower flammability or explosive limits Vapor Pressure Vapor Density	Values7.00Not determined100 °C / 212 °FNon-flammableNot determinedNot determined	<u>Remarks • Method</u>	
Relative Density Water Solubility Solubility in other solvents Partition Coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic Viscosity Explosive Properties Oxidizing Properties	~1 Miscible in water Not determined Not determined Not determined Not determined Not determined Not determined Not determined	@ 60°F (ASTM D 1298)	
Other information Molecular weight	Potassium Phosphate Monobasic 136.	09 grams	

Potassium Phosphate Monobasic 136.09 grams Sodium Phosphate Dibasic 141.96 grams

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

See below - Incompatible Materials.

Hazardous Polymerization

Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible materials

Hazardous reaction in aqueous solution may occur with chlorine, hypochlorous acid, hypochlorites, cyanides or sulfides.

Hazardous decomposition products

May emit toxic fumes of phosphorous oxide.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Eye Contact	Avoid contact with eyes.
Skin Contact	May be harmful in contact with skin.
Inhalation	Do not inhale.
Ingestion	Do not ingest.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Phosphate 7558-79-4	= 17 g/kg (Rat)	-	-
Potassium Phosphate 7778-77-0	= 3200 mg/kg (Rat)	> 4640 mg/kg (Rabbit)	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document.

Oral LD50	6,238.50 mg/kg
Dermal LD50	4,644.64 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

<u>Mobility</u>

Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.
	14. TRANSPORT INFORMATION
<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
DOT	Not regulated
IATA	Not regulated
IMDG_	Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory	DSL/NDSL	EINECS/ELI	ENCS	IECSC	KECL	PICCS	AICS
		Status		NCS					
Sodium Phosphate	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Potassium Phosphate	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium Phosphate	5000 lb		RQ 5000 lb final RQ
7558-79-4			RQ 2270 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium Phosphate	5000 lb			Х

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Sodium Phosphate	Х	Х	Х
7558-79-4			

16. OTHER INFORMATION

<u>NFPA</u> HMIS	Health Hazards 0 Health Hazards 0	Flammability 0 Flammability 0	Instability 0 Physical hazards 0	Special Hazards Not determined Personal Protection Not determined
Issue Date: Revision Date: Revision Note:	15-Feb-2012 12-Aug-2019 Regulatory review			

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release 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 or in any process, unless specified in the text.

End of Safety Data Sheet



Safety Data Sheet

Hydrion® pH and sanitizer test kits since 1934

Issue Date: 15-Feb-2012

Revision Date: 12-Aug-2019

Version 2

1. IDENTIFICATION

Product identifier Product Name	HYDRION BUFFER pH 10.00		
Other means of identification SDS #	MEL-003		
Recommended use of the chemica	I and restrictions on use		
Recommended Use	For preparation of buffer standards in distilled water.		
Details of the supplier of the safety	<u>/ data sheet</u>		
Supplier Address			
MICRO ESSENTIAL LABORATORY, INC PO BOX 100824, 4224 AVENUE H			
BROOKLYN, NY 11210			
Emergency telephone number			
Company Phone Number	PHONE: 718-338-3618		
	FAX: 718-692-4491 (8:00AM TO 4:00PM EASTERN STANDARD TIME)		
Emergency Telephone	INFOTRAC 1-352-323-3500 (International)		
	1-800-535-5053 (North America)		
	2. HAZARDS IDENTIFICATION		

Appearance White to off white Granules, crystals or powder

Physical state Solid

Odor Odorless

Classification

Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Serious eye damage/eye irritation	Category 2

Signal Word Warning

Hazard statements

Harmful if inhaled Causes serious eye irritation



Precautionary Statements - Prevention Avoid breathing dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area Wash face, hands and any exposed skin thoroughly after handling Wear eye protection/ face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

IF INHALED: Remove person to fresh air and keep comfortable for breathing

Call a POISON CENTER or doctor if you feel unwell

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Sodium carbonate	497-19-8	50-70

**If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret. **

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash affected areas thoroughly with soap and water for at least 15 minutes. Get medical attention if necessary.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Call a poison center or doctor/physician if you feel unwell.
Ingestion	Drink plenty of water. Do not induce vomiting without medical advice. Get medical attention if necessary.
Most important symptoms	s and effects, both acute and delayed
Symptoms	Dust may be irritating to eyes. Prolonged skin contact may cause skin irritation or allergic reaction. The eye irritation may be severe. Ingestion can irritate stomach and cause mouth

Dust may be irritating to eyes. Prolonged skin contact may cause skin irritation or allergic reaction. The eye irritation may be severe. Ingestion can irritate stomach and cause mouth burns. Prolonged exposure by inhalation may cause irritation of the nose, throat and respiratory tract. Prolonged exposure to BULK POWDER may cause irritation to the eyes, skin and respiratory system. May be harmful if swallowed.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Non-flammable.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not release runoff from fire control methods to sewers or waterways.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Use personal protective equipment as required. Keep unnecessary people away, isolate hazard area and deny entry. Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only.	
Environmental precautions		
Environmental precautions	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.	
Methods and material for containm	ent and cleaning up	
Methods for Containment	Prevent further leakage or spillage if safe to do so.	
Methods for Clean-Up	Cover spilled material with a dry acid, such as Citric or Boric. Scoop up into a large beaker. Adjust pH between 6 and 9 with a diluted acid, such as Sulfuric or Citric. Flush reacted material to the drain with a large excess of water but ONLY if permitted by local authorities and regulations. If not permitted, must be disposed of as a RCRA waste.	
	7. HANDLING AND STORAGE	
Precautions for safe handling		
Advice on Safe Handling	 Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. The following precautions pertain only to BULK POWDER handling: Ventilation: Use adequate general or local ventilation to keep fume and dust levels as low as possible Respiratory Protection: Use NIOSH approved dust respirator when handling bulk powder Eye Protection: Chemical splash goggles with side shields when handling bulk powder Gloves: Natural rubber, butyl neoprene or equivalent. Wear full cover clothing when handling bulk powder. Do not breathe dust. Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling. Do NOT take internally. 	
Conditions for safe storage, includ	ng any incompatibilities	
Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Avoid excessive temperatures & high humidity.	
Incompatible Materials	Hazardous reaction in aqueous solution may occur with strong acid, aluminum, fluorine, phosphorus pentoxide and ammonium phosphate monobasic.	
8. EX	POSURE CONTROLS/PERSONAL PROTECTION	
Exposure Guidelines	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region-specific regulatory bodies	
Appropriate engineering controls		
Engineering Controls	Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers. Local exhaust ventilation recommended.	
Individual protection measures, su	ch as personal protective equipment	
Eye/Face Protection	Refer to 29 CFR 1910.133 for eye and face protection regulations. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with, contact lenses.	

Skin and Body Protection	Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact.
Respiratory Protection	Seek professional advice prior to respirator selection and use. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. WARNING! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.
General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before r Remove this material from your shoes and clean personal protective equipment. Neve drink, or smoke in work areas. Practice good personal hygiene after using this materia especially before eating, drinking, smoking, using the toilet, or applying cosmetics.	

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance	Solid White to off white Granules, crystals or powder	Odor	Odorless
Color	White to off white	Odor Threshold	Not determined
Property pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation Rate Flammability (Solid, Gas) Flammability Limit in Air Upper flammability or explosive limits Lower flammability or explosive limits Vapor Pressure Vapor Density Relative Density	Values 10.00 Not determined 100 °C / 212 °F Non-flammable Not determined Not determined Not determined Not determined Not determined Not determined ~1	Remarks • Method @ 60°F (ASTM D 1298)	
Water Solubility Solubility in other solvents Partition Coefficient Autoignition temperature Decomposition temperature Kinematic viscosity Dynamic Viscosity Explosive Properties Oxidizing Properties Other information Molecular weight	Miscible in water Not determined Not determined Not determined Not determined Not determined Not determined Not determined		
molecular weight	Sodium Carbonate 105.99 grams		

Sodium Bicarbonate 84.01 grams

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

See below - Incompatible Materials.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Keep out of reach of children.

Incompatible materials

Hazardous reaction in aqueous solution may occur with strong acid, aluminum, fluorine, phosphorus pentoxide and ammonium phosphate monobasic.

Hazardous decomposition products

Toxic fumes of carbon monoxide or irritant smoke.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Eye Contact	Avoid contact with eyes.
Skin Contact	Avoid contact with skin.
Inhalation	Harmful if inhaled.
Ingestion	May be harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium carbonate 497-19-8	= 4090 mg/kg (Rat)	-	-
Sodium Bicarbonate 144-55-8	= 4220 mg/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms	Please see section 4 of this SDS for symptoms.
Delayed and immediate effects as v	well as chronic effects from short and long-term exposure
Serious eye damage/eye irritation	Causes serious eye irritation.
Carcinogenicity	Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.
Numerical measures of toxicity	
The following values are calculated Oral LD50 ATEmix (inhalation-dust/mist)	I based on chapter 3.1 of the GHS document. 4,141.00 mg/kg 1.50 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Sodium carbonate 497-19-8	242: 120 h Nitzschia mg/L EC50	300: 96 h Lepomis macrochirus mg/L LC50 static 310 - 1220: 96 h Pimephales promelas mg/L LC50 static	265: 48 h Daphnia magna mg/L EC50
Sodium Bicarbonate	650: 120 h Nitzschia linearis mg/L	8250 - 9000: 96 h Lepomis	2350: 48 h Daphnia magna mg/L
144-55-8	EC50	macrochirus mg/L LC50 static	EC50

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility Not determined

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Sodium carbonate 497-19-8	Corrosive
497-19-8	

	14. TRANSPORT INFORMATION
<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<u>DOT</u>	Not regulated
IATA	Not regulated
IMDG_	Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Sodium carbonate	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Sodium Bicarbonate	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

16. OTHER INFORMATION					
<u>NFPA</u>	Health Hazards	Flammability	Instability	Special Hazards Not determined	
<u>HMIS</u>	Health Hazards	Flammability 0	Physical hazards 0	Personal Protection Not determined	
Issue Date: Revision Date: Revision Note:	15-Feb-2012 12-Aug-2019 Regulatory review				

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release 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 or in any process, unless specified in the text.

End of Safety Data Sheet

MICRO ESSENTIAL

Safety Data Sheet

Hydrion® pH and sanitizer test kits since 1934

Issue Date: 06-Oct-2009

Revision Date: 12-Aug-2019

Version 2

1. IDENTIFICATION				
Product identifier Product Name	HYDRION COLOR KEY BUFFER PRESERV	ATIVE		
Other means of identification SDS #	MEL-005R			
UN/ID No	UN1993			
Recommended use of the chemical Recommended Use	and restrictions on use To prolong shelf life of buffer solution.			
Details of the supplier of the safety Supplier Address MICRO ESSENTIAL LABORATORY, PO BOX 100824, 4224 AVENUE H BROOKLYN, NY 11210				
Emergency telephone number Company Phone Number	PHONE: 718-338-3618 FAX: 718-692-4491 TIME)	(8:00AM TO 4:00PM EASTERN STANDARD		
Emergency Telephone	INFOTRAC 1-352-323-3500 (International) 1-800-535-5053 (North America)			
	2. HAZARDS IDENTIFICATION	l		
Appearance Red liquid	Physical state Liquid	Odor Odorless		

Classification

Serious eye damage/eye irritation	Category 2
Flammable liquids	Category 3

Signal Word Warning

Hazard statements Causes serious eye irritation Flammable liquid and vapor



Precautionary Statements - Prevention

Wear protective gloves/protective clothing/eye protection/face protection Wash face, hands and any exposed skin thoroughly after handling Keep away from heat/sparks/open flames/hot surfaces. — No smoking Keep container tightly closed Ground/bond container and receiving equipment Use explosion-proof equipment Use only non-sparking tools Take precautionary measures against static discharge

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower IN CASE OF FIRE: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Isopropyl Alcohol	67-63-0	10-15

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

General Advice	Provide this SDS to medical personnel for treatment.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Wash affected areas thoroughly with soap and water for at least 15 minutes. If skin irritation persists, call a physician.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Get medical attention if you feel unwell.
Ingestion	Drink plenty of water. Do not induce vomiting without medical advice. Call a physician.
Most important symptoms and effe	ects, both acute and delayed
Symptoms	Prolonged exposure by inhalation may cause irritation of the nose, throat and respiratory tract. Irritating to eyes. Prolonged contact may cause skin irritation or allergic reaction. Ingestion can irritate stomach and cause mouth burns.
Indication of any immediate medica	al attention and special treatment needed
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Use CO2, dry chemical, or foam for extinction.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Flammable liquid and vapor. Toxic fumes may be given off when material is exposed to fire.

Hazardous combustion products Carbon oxides.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not release runoff from fire control methods to sewers or waterways.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective ed	guipment and emergency procedures
Personal Precautions	Remove all sources of ignition. Use personal protective equipment as required. Keep unnecessary people away, isolate hazard area and deny entry. Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel only.
For Emergency Responders	Follow applicable OSHA regulations (29 CFR 1910.120).
Environmental precautions	
Environmental precautions	Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS.
Methods and material for containm	ent and cleaning up
Methods for Containment	Prevent further leakage or spillage if safe to do so. Contain with inert material.
Methods for Clean-Up	Use clean non-sparking tools to collect absorbed material. Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations. For waste disposal, see section 13 of the SDS.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling. Do NOT take internally. Avoid breathing dust/fume/gas/mist/vapors/spray. Keep container tightly closed. Keep cool. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Ground/bond container and receiving equipment. Use spark-proof tools and explosion-proof equipment. Use only with adequate ventilation. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Avoid excessive temperatures & high humidity.
Incompatible Materials	Hazardous reaction in aqueous solution may occur with chlorine, hypochlorus acid,

hypochlorites, cyanides or sulfides. 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Isopropyl Alcohol	STEL: 400 ppm	TWA: 400 ppm	IDLH: 2000 ppm
67-63-0	TWA: 200 ppm	TWA: 980 mg/m ³	TWA: 400 ppm
		(vacated) TWA: 400 ppm	TWA: 980 mg/m ³
		(vacated) TWA: 980 mg/m ³	STEL: 500 ppm
		(vacated) STEL: 500 ppm	STEL: 1225 mg/m ³
		(vacated) STEL: 1225 mg/m ³	c

Appropriate engineering controls

Engineering Controls	Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers. Local exhaust ventilation recommended.
Individual protection measures, su	ch as personal protective equipment
Eye/Face Protection	Refer to 29 CFR 1910.133 for eye and face protection regulations. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with, contact lenses.
Skin and Body Protection	Wear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or repeated skin contact.
Respiratory Protection	Seek professional advice prior to respirator selection and use. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. WARNING!: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory program that includes at least: medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.
General Hygiene Consideratior	Is Handle in accordance with good industrial hygiene and safety practice. Contaminated Equipment: Separate contaminated work clothes from street clothes. Launder before reuse. Remove this material from your shoes and clean personal protective equipment. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Appearance Color	Liquid Red liquid Red	Odor Odor Threshold	Odorless Not determined
Property pH Melting point / freezing point Boiling point / boiling range Flash point Evaporation Rate Flammability (Solid, Gas) Flammability Limit in Air Upper flammability or explosive limits	Values Not determined Not determined 34.72 °C / 94.5 °F Not determined Not determined	<u>Remarks • Method</u>	
Lower flammability or explosive limits	Not determined		

Vapor Pressure	Not determined
Property_	<u>Values</u>
Vapor Density	Not determined
Relative Density	~1.015
Water Solubility	Miscible in water
Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

Remarks • Method

@ 60°F (ASTM D 1298)

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

See below - Incompatible Materials.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Heat, flames, ignition sources and incompatibles.

Incompatible materials

Hazardous reaction in aqueous solution may occur with chlorine, hypochlorus acid, hypochlorites, cyanides or sulfides.

Hazardous decomposition products

Carbon oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information	
Eye Contact	Causes serious eye irritation.
Skin Contact	Prolonged contact may cause redness and irritation.
Inhalation	May cause irritation if inhaled.
Ingestion	Can burn mouth, throat, and stomach.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Isopropyl Alcohol 67-63-0	= 1870 mg/kg(Rat)	= 4059 mg/kg (Rabbit)	= 72600 mg/m ³ (Rat)4 h
Polyethylene glycol 25322-68-3	= 22 g/kg (Rat) = 28 g/kg (Rat)	> 20 g/kg (Rabbit)	-
Methyl Paraben 99-76-3	= 2100 mg/kg (Rat)	-	-

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity

Group 3 IARC components are "not classifiable as human carcinogens".

Chemical name	ACGIH	IARC	NTP	OSHA
Isopropyl Alcohol		Group 3		Х
67-63-0				

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

OSHA (Occupational Safety and Health Administration of the US Department of Labor) X - Present

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Oral LD50	14,384.60 mg/kg
Dermal LD50	28,964.40 mg/kg
ATEmix (inhalation-dust/mist)	558.50 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Isopropyl Alcohol	1000: 72 h Desmodesmus	9640: 96 h Pimephales promelas	13299: 48 h Daphnia magna mg/L
67-63-0	subspicatus mg/L EC50 1000: 96 h	mg/L LC50 flow-through 11130: 96	EC50
	Desmodesmus subspicatus mg/L	h Pimephales promelas mg/L LC50	
	EC50	static 1400000: 96 h Lepomis	
		macrochirus µg/L LC50	
Polyethylene glycol		5000: 24 h Carassius auratus mg/L	
25322-68-3		LC50	
Methyl Paraben		59.5: 96 h Oryzias latipes mg/L	
99-76-3		LC50 semi-static	

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
Isopropyl Alcohol	0.05
67-63-0	

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated Packaging	Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Isopropyl Alcohol	Toxic
67-63-0	Ignitable

14. TRANSPORT INFORMATION

<u>Note</u>	Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.
<u>DOT</u> UN/ID No Proper Shipping Name Hazard class Packing Group	UN1993 Flammable liquid, n.o.s. (contains Isopropyl alcohol) 3 III
IATA UN number Proper Shipping Name Transport hazard class(es) Packing Group	UN1993 Flammable liquid, n.o.s. (contains Isopropyl alcohol) 3 III
IMDG UN number Proper Shipping Name Transport hazard class(es) Packing Group	UN1993 Flammable liquid, n.o.s. (contains Isopropyl alcohol) 3 III

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Isopropyl Alcohol	Х	ACTIVE	Х	X	Х	Х	Х	Х	Х
Polyethylene glycol	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х
Methyl Paraben	Х	ACTIVE	Х	Х	Х	Х	Х	Х	Х

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

<u>SARA 313</u>

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Isopropyl Alcohol - 67-63-0	67-63-0	10-15	1.0

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Isopropyl Alcohol	Х	X	Х
67-63-0			

16. OTHER INFORMATION

NFPA	Health Hazards	Flammability	Instability	Special Hazards
	2	1	0	Not determined
<u>HMIS</u>	Health Hazards	Flammability	Physical hazards	Personal Protection
	2	1	0	H

Issue Date:	06-Oct-2009
Revision Date:	12-Aug-2019
Revision Note:	Regulatory review

Disclaimer

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End of Safety Data Sheet