ZSDS016X Rev. 5/2015 Effective Date 12/12/2013



Safety Data Sheet

Issue Date: 15-Feb-2012 Revision Date: 12-Dec-2013 Version 1

1. IDENTIFICATION

Product Identifier

Product Name HYDRION BUFFER pH-4.00

Other means of identification

SDS # MEL-001

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 (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance White to off white Granules,

Physical State Solid

Odor Odorless

Classification

crystals or powder

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

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

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

Symptoms Dust 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

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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.

Hazardous Combustion Products May emit toxic fumes of phosphorous oxide.

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 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 containment 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, including any incompatibilities

Keep container tightly closed and store in a cool, dry and well-ventilated place. Avoid **Storage Conditions**

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 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, such as personal protective equipment

Eye/Face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

> OSHA's eye and face protection regulations in 29 CFR 1910.133. 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 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.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State Solid

Appearance White to off white Granules, crystals or Odor Odorless

powder

Color White to off white Odor Threshold Not determined

 Property
 Values
 Remarks • Method

 pH
 4.00
 @ 25 °C (77 °F)

. Melting Point/Freezing Point Not determined **Boiling Point/Boiling Range** 100 °C / 212 °F Flash Point Non-flammable **Evaporation Rate** Not determined Flammability (Solid, Gas) Not determined **Upper Flammability Limits** Not determined **Lower Flammability Limit** Not determined **Vapor Pressure** Not determined **Vapor Density** Not determined

Specific Gravity ~1 (1=Water) @ 4°C

Water Solubility Miscible in water Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined

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, hypochlorus 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 Avoid inhalation of dust.

Ingestion May be harmful if swallowed.

Component Information

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

Information on physical, chemical and toxicological effects

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 This product does not contain any carcinogens or potential carcinogens as listed by OSHA,

IARC or NTP.

Numerical measures of toxicity

Not determined

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

Not determined.

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.

14. TRANSPORT INFORMATION

Note 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

Not determined

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

Instability NFPA **Health Hazards Flammability Special Hazards** Not determined **HMIS Health Hazards Flammability Physical Hazards Personal Protection** Not determined

Issue Date: 15-Feb-2012 **Revision Date:** 12-Dec-2013 **Revision Note:** New format

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

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Issue Date: 15-Feb-2012 Revision Date: 12-Dec-2013 Version 1

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

ΓΙΜΕ)

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance White to off white Granules, Physical State Solid Odor Odorless

crystals or powder

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.

Unknown Acute Toxicity

40% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Sodium Phosphate	7558-79-4	60-70
Potassium Phosphate	7778-77-0	30-40

^{**}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

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

Symptoms Dust 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

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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.

Hazardous Combustion Products May emit toxic fumes of phosphorous oxide.

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 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 containment 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, 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 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, such as personal protective equipment

Eye/Face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133. 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,

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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 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 Solid

Appearance White to off white Granules, crystals or Odor Odorless

powder

Color White to off white Odor Threshold Not determined

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 7.00 @ 25 °C (77 °F)

Melting Point/Freezing Point Not determined **Boiling Point/Boiling Range** 100 °C / 212 °F **Flash Point** Non-flammable **Evaporation Rate** Not determined Flammability (Solid, Gas) Not determined **Upper Flammability Limits** Not determined **Lower Flammability Limit** Not determined **Vapor Pressure** Not determined **Vapor Density** Not determined

Specific Gravity ~1 (1=Water) @ 4°C

Water Solubility Miscible in water Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined Kinematic Viscosity Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined

Molecular weight Potassium Phosphate Monobasic 136.09 grams

Sodium Phosphate Dibasic 141.96 grams

10. STABILITY AND REACTIVITY

<u>Reactivity</u>

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, hypochlorus 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 Avoid inhalation of dust.

Do not taste or swallow. Ingestion

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Phosphate	= 17 g/kg (Rat)	-	-
7558-79-4			

Information on physical, chemical and toxicological effects

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

This product does not contain any carcinogens or potential carcinogens as listed by OSHA, Carcinogenicity

IARC or NTP.

Numerical measures of toxicity

Not determined

Unknown Acute Toxicity 40% of the mixture consists of ingredient(s) of unknown toxicity.

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

Not determined.

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.

14. TRANSPORT INFORMATION

Please see current shipping paper for most up to date shipping information, including Note

exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Not determined

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

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

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)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium Phosphate 7558-79-4 (60-70)	5000 lb			X

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	X	X	X
7558-79-4			

16. OTHER INFORMATION

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

Issue Date:15-Feb-2012Revision Date:12-Dec-2013Revision Note:New format

Disclaimer

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End of Safety Data Sheet

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Safety Data Sheet

Issue Date: 15-Feb-2012 Revision Date: 12-Dec-2013 Version 1

1. IDENTIFICATION

Product Identifier

Product Name HYDRION BUFFER pH 10.00

Other means of identification

SDS # MEL-003

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

ΓΙΜΕ)

Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance White to off white Granules, Physical State Solid Odor Odorless

crystals or powder

Classification

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

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

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/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 victim to fresh air and keep at rest in a position comfortable for breathing

Call a poison center or doctor/physician if you feel unwell

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Sodium carbonate	497-19-8	50-70
Sodium Bicarbonate	144-55-8	30-50

^{**}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

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 and effects

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 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.

Hazardous Combustion Products Toxic fumes of carbon monoxide or irritant smoke.

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 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 containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Cover spilled material with a dry acid, such as Citric or Boric. Scoop up into a large beaker. **Methods for Clean-Up**

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, including any incompatibilities

Keep container tightly closed and store in a cool, dry and well-ventilated place. Avoid **Storage Conditions**

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. EXPOSURE 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, such as personal protective equipment

Eye/Face ProtectionWear appropriate protective eyeglasses or chemical safety goggles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in

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conjunction with, contact lenses.

Skin and Body ProtectionWear chemically protective gloves, boots, aprons, and gauntlets to prevent prolonged or

repeated skin contact.

Respiratory ProtectionSeek 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 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 Solid

Appearance White to off white Granules, crystals or Odor Odorless

powder

Color White to off white Odor Threshold Not determined

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH 10.00 @ 25 °C (77 °F)

Melting Point/Freezing PointNot determinedBoiling Point/Boiling Range100 °C / 212 °FFlash PointNon-flammableEvaporation RateNot determinedFlammability (Solid, Gas)Not determined

Upper Flammability Limits
Lower Flammability Limit
Vapor Pressure
Vapor Density
Not determined
Not determined
Not determined
Not determined
Not determined
Not determined

Specific Gravity ~1 (1=Water) @ 4°C

Water Solubility
Solubility in other solvents
Partition Coefficient
Auto-ignition Temperature

Miscible in water
Not determined
Not determined
Not determined

Decomposition Temperature Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** 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 Causes serious eye irritation.

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)	-	-

Information on physical, chemical and toxicological effects

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

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This product does not contain any carcinogens or potential carcinogens as listed by OSHA,

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IARC or NTP.

Numerical measures of toxicity

Carcinogenicity

Not determined

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	Toxicity to microorganisms	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 144-55-8	650: 120 h Nitzschia linearis mg/L EC50	8250 - 9000: 96 h Lepomis macrochirus mg/L LC50 static		2350: 48 h Daphnia magna mg/L EC50

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

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.

<u>California Hazardous Waste Status</u> This product contains one or more substances that are listed with the State of California as a hazardous waste

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

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including

Revision Date: 12-Dec-2013

exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Not determined

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

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

Revision Date: 12-Dec-2013

NFPAHealth HazardsFlammabilityInstabilitySpecial Hazards200Not determinedHMISHealth HazardsFlammabilityPhysical HazardsPersonal Protection200Not determined

Issue Date:15-Feb-2012Revision Date:12-Dec-2013Revision Note:New format

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

ZSDS016X Rev. 5/2015 Effective Date 5/20/2014



Safety Data Sheet

Issue Date: 06-Oct-2009 Revision Date: 12-Aug-2015 Version 1

1. IDENTIFICATION

Product Identifier

Product Name HYDRION COLOR KEY BUFFER PRESERVATIVE

Other means of identification

SDS # MEL-005

UN/ID No UN1993

Recommended use of the chemical and restrictions on use

Recommended Use To prolong shelf life of buffer solution.

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 (24 hr) INFOTRAC 1-352-323-3500 (International)

1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

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

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

Wear protective gloves/protective clothing/eye protection/face protection

<u>Precautionary Statements - Response</u>

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): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

IN CASE OF FIRE: Use CO2, dry chemical, or foam for extinction

Precautionary Statements - Storage

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
Polyethylene glycol	25322-68-3	1-5
Thymolsulfonphthalein	81012-93-3	< 1.0
Methyl Paraben	99-76-3	< 1.0

^{**}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

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 effects

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 medical 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 equipment 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.

Follow applicable OSHA regulations (29 CFR 1910.120). For Emergency Responders

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 containment 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	

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Local exhaust ventilation recommended.

Individual protection measures, such 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.

Seek professional advice prior to respirator selection and use. Select respirator based on its **Respiratory Protection**

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 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 Liquid Appearance Red liquid

Odor Odorless Color Red **Odor Threshold** Not determined

Property Values Remarks • Method

Not determined pН **Melting Point/Freezing Point** Not determined **Boiling Point/Boiling Range** Not determined Flash Point 34.72 °C / 94.5 °F **Evaporation Rate** Not determined Flammability (Solid, Gas) Not determined **Upper Flammability Limits** Not determined

Lower Flammability Limit

Vapor Pressure Not determined

Not determined

Vapor Density Not determined

Specific Gravity ~1.015 (1=Water) @ 4°C

Water Solubility Miscible in water Solubility in other solvents Not determined **Partition Coefficient** Not determined **Auto-ignition Temperature** Not determined **Decomposition Temperature** Not determined **Kinematic Viscosity** Not determined **Dynamic Viscosity** Not determined **Explosive Properties** Not determined **Oxidizing Properties** Not determined

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)	$= 72600 \text{ mg/m}^3 \text{ (Rat) 4 h}$
Polyethylene glycol 25322-68-3	= 28 g/kg (Rat)	> 20 mL/kg (Rabbit) > 20 g/kg (Rabbit)	-
Methyl Paraben 99-76-3	= 2100 mg/kg (Rat)	-	-

Information on physical, chemical and toxicological effects

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 The table below indicates whether each agency has listed any ingredient as a carcinogen.

However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Isopropyl Alcohol		Group 3		X
67-63-0				

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

Not determined

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	Toxicity to microorganisms	Crustacea
Isopropyl Alcohol 67-63-0	1000: 96 h Desmodesmus subspicatus mg/L EC50 1000: 72 h Desmodesmus subspicatus mg/L EC50	9640: 96 h Pimephales promelas mg/L LC50 flow-through 1400000: 96 h Lepomis macrochirus µg/L LC50 11130: 96 h Pimephales promelas mg/L LC50 static	-	13299: 48 h Daphnia magna mg/L EC50
Polyethylene glycol 25322-68-3		5000: 24 h Carassius auratus mg/L LC50		

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

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

Please see current shipping paper for most up to date shipping information, including Note

exemptions and special circumstances.

DOT

UN/ID No UN1993

Proper Shipping Name Flammable liquid, n.o.s. (contains Isopropyl alcohol)

Hazard Class Packing Group Ш

IATA

UN/ID No UN1993

Proper Shipping Name Flammable liquid, n.o.s. (contains Isopropyl alcohol)

Hazard Class Packing Group Ш

IMDG

UN/ID No UN1993

Proper Shipping Name Flammable liquid, n.o.s. (contains Isopropyl alcohol)

Hazard Class 3 **Packing Group** Ш

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL	NDSL	EINECS	ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Isopropyl Alcohol	Present	Х		Present		Present	Х	Present	Χ	Х
Polyethylene glycol	Present	Х				Present	Х	Present	Χ	Х
Methyl Paraben	Present	Х		Present		Present	Х	Present	Χ	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 contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Isopropyl Alcohol - 67-63-0	67-63-0	13	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

U.S. State Right-to-Know Regulations

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

16. OTHER INFORMATION

NFPA_	Health Hazards	Flammability	Instability	Special Hazards
	2	1	0	Not determined
HMIS_	Health Hazards	Flammability	Physical Hazards	Personal Protection
	2	1	0	Н

Issue Date: 06-Oct-2009 **Revision Date:** 12-Aug-2015 **Revision Note:** New format

Disclaimer

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End of Safety Data Sheet