



Safety Data Sheet

Section 1 - Chemical Product and Company Identification

Product Name: Healthy Ponds® AquaSphere®PRO (biodegradable)

Other Identifier: Item # 51115

Description: A proprietary blend of naturally occurring, non-pathogenic, non-genetically altered microorganisms on a natural carrier surrounded by a biodegradable biopolymer resin shell

Recommended Use: Water Treatment

Form: Powder and Biopolymer Resin

Supplier Identification: Bioverse, Inc.
2220 Research Lane,
Worthington, MN 56187
877-948-0303

Website: www.healthyponds.com

Email: support@bioverse.com

Emergency Number: Chemtrec 1-800-424-9300 (Emergency 24 hours); Outside US 1-703-527-3887
Chemtrec Administrative Office Telephone Number 1-800-262-8200

Section 2 – Hazards Identification

INNER CONTENTS

Hazard Class: None

Signal Word: None

Hazard Statement: None

Precautionary Statement:

Do not breathe dust. Do not get on skin or clothing. Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Keep container closed and sealed until ready for use. Wash thoroughly after handling. Do not ingest.



Hazard Symbol:

OUTER SHELL MATERIAL

OSHA HAZARDS

No known OSHA hazards.

Not considered hazardous according to EC Directives 67/548/EEC or 1999/45/EC and their valid adaptations and derived national regulations.



HMIS Classification (estimated)

Health hazard: 0
Flammability: 1
Physical hazards: 0

NFPA Rating (estimated)

Health hazard: 0
Fire: 1
Reactivity 0

Potential Health Effects

Eye: None.

Skin: None

Ingestion: None

Inhalation: None.

Chronic: No information found.

Section 3 - Composition/Information on Ingredients

INNER CONTENTS

CAS#	Chemical Name	EINECS/ELINCS	IUB	% by weight
9000-90-2	Alpha amylase	232-565-6	3.2.1.1	< 0.1%
9012-54-8	Cellulase	232-734-4	3.2.1.4	< 0.1%
9001-82-1	Lipase	232.619..9	3.1.1.3	< 0.01%
9014-01-1	Protease (subtilisin)	232-752-2	3.4.21.62	< 0.05%

Other components: remaining components of this product are proprietary, nonhazardous and/or are present at concentrations below reportable limits.

OUTER SHELL MATERIAL

Product consists of a proprietary blend of polyhydroxyalkanoate (PHA) base polymer, additives, and mineral fillers.

Section 4 – First Aid Measures

INNER CONTENTS

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids; get medical aid.

Skin: Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of water.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.



OUTER SHELL MATERIAL

Eyes: None

Skin: None.

Ingestion: None.

Inhalation: None.

Notes to Physician: None.

Section 5 – Fire Fighting Measures

INNER CONTENTS

Fire Fighting Extinguishing media: Water, foam, chemical and carbon dioxide

Fire Fighting Chemical Hazards: May cause allergic respiratory reaction

Fire Fighting Protective Actions: Not available

OUTER SHELL MATERIAL

Flash Point: Not determined.

Auto-Ignition Temperature: Not determined.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or chemical foam.

Special Protective Equipment for Fire-fighters: Wear a self-contained breathing apparatus in pressure-demand mode, MSHA/NIOSH (approved or equivalent), and full protective gear.

Hazardous Combustion Products: crotonic acid, carbon dioxide, carbon monoxide

Combustible Dust: None.

Section 6 - Accidental Release Measures

INNER CONTENTS

Personal precautions, protective equipment and emergency procedures: Contact unnecessary and unprotected personnel from entering area. Provide sufficient ventilation and remove contaminated clothing. Do not walk through spilled material. Avoid breathing dust.

Environmental precautions: Removal by mechanical means (ie vacuuming with HEPA filters) is preferred. Solid can be placed in sealed containers for disposal. Dilute remainder with plenty of water avoiding the formation of aerosols and flush to an approved drain according to local guidelines.

Methods and material for containment and cleaning up: Remove spilled material immediately to reduce the formation of dust using mechanical means (ie vacuuming with HEPA filters) is preferred. Solid can be placed in sealed containers for disposal. Dilute remainder with plenty of water avoiding the formation of aerosols and flush to an approved drain according to local guidelines.



OUTER SHELL MATERIAL

General Information: None.

Spills/Leaks: None.

Section 7 - Handling and Storage

INNER CONTENTS

Precautions for safe handling: Segregate from acids, peroxides, and combustible organic materials or easily oxidizable materials. Keep from freezing. Protect against physical damage. Keep away from heat and flame.

Conditions for safe storage including any incompatibilities: Keep away from heat and flame. Store in a cool dry area in closed original containers.

Hygiene: not specified

OUTER SHELL MATERIAL

Handling: None.

Storage: None.

Section 8 - Exposure Controls/Personal Protection

INNER CONTENTS

Occupational exposure limits: None established

Biological limit values: None established

Appropriate engineering controls:

Eye/face protective equipment:

Skin protection:

Respiratory protection:

OUTER SHELL MATERIAL

Engineering Controls: None.

OSHA Vacated PELs: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:

Skin:

Respirators:



Section 9 - Physical and Chemical Properties

INNER CONTENTS

Physical State:	Solid
Appearance:	Tan free flowing powder
Odor:	Fermentation odor
Odor threshold:	Not established
pH:	Not established.
Freezing/Melting Point:	Not established.
Initial boiling point and boiling range:	Not available.
Flash Point:	Not available.
Evaporation Rate:	Not available.
Flammability:	Not available
Upper/lower flammability or exposure limits:	Not available
Vapor Pressure:	Not available.
Vapor Density:	Not available
Relative Density:	Not established
Solubility:	Dispersible in water
Partial coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available
Explosive properties:	Not available
Oxidizing properties:	Not available

Other Information: No additional information.

OUTER SHELL MATERIAL

Physical State:	Solid
Appearance:	Off-white semi-sphere
Odor:	None
pH:	Not applicable
Vapor Pressure:	Not determined
Vapor Density:	Not determined
Evaporation Rate:	Not available
Viscosity:	Not available
Boiling Point:	Not applicable
Melting Point:	100°C-190°C (212°F-374°F)
Decomposition Temperature:	Above 200°C (392°F)
Specific Gravity/Density:	1.4 g/cm ³
Molecular Weight:	Approximately > 100,000 (by GPC)
Solubility:	Soluble in chloroform, methylene chloride, N-Methylpyrrolidone



Section 10 - Stability and Reactivity

INNER CONTENTS

Chemical Stability:	Stable.
Hazardous Reactions:	None identified
Conditions to Avoid:	None known
Incompatible materials:	None known
Hazardous decomposition products:	None

OUTER SHELL MATERIAL

Chemical Stability: Stable under recommended storage conditions.
Conditions to Avoid: Incompatible materials, excess heat, flames ignition sources.
Incompatibilities with Other Materials: Strong oxidizing agents, strong acids.
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide, crotonic acid
Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

INNER CONTENTS

Acute toxicity: Ingestion of this material is not known to result in adverse effects. No specific data available
Skin Corrosion/irritation: this material may be a mild skin irritant.
Serious eye damage/irritation: overexposure to the eye is characterized by irritation
Respiratory or skin sensitization: overexposure by inhalation may cause sensitization and allergic response in hypersensitive individuals; not a skin sensitizer
Germ cell mutagenicity: Not available.
Carcinogenicity: Not listed by IARC, OSHA, or NTP
Reproductive toxicity: No data available
Aspiration hazard: see respiratory sensitization

OUTER SHELL MATERIAL

Epidemiology: No information available.
Teratogenicity: No information available.
Reproductive Effects: No information available.
Mutagenicity: No information available.
Neurotoxicity: No information available.

Section 12 - Ecological Information

INNER CONTENTS

Ecotoxicity: No specific data available
Persistence and degradability: No specific data; components are considered to be biodegradable.
Bioaccumulation potential: No specific data available; components considered to be biodegradable will not bioaccumulate.
Mobility in soil: No data available
Results of PBT and vPvB assessment: No specific data available; the substance does not meet the criteria for characterization as either PBT or vPvB
Other adverse effects: None known



OUTER SHELL MATERIAL

Mirel base resin has the following certifications for biodegradability:

BPI-certified to meet U.S. standard for compostable plastics that will compost satisfactorily in municipal and industrial aerobic composting facilities according to ASTM D6400

Vinçotte-certified as "OK Biodegradable Water" for nature freshwater environments.

Vinçotte-certified as "OK Biodegradable Soil" for nature soil environments.

Vinçotte-certified as "OK Compost" for biodegradability in industrial composting units to meet E.U. standard for compostable plastics according to EN 13432 / EN 14995.

Vinçotte-certified as "OK Compost Home" for biodegradability in home composting systems.

P1003 is Vinçotte-certified as "OK biobased" for biobased carbon content of more than 80%, Class 4.

Meets the U.S. standard for non-floating biodegradable plastics in marine environments according to ASTM D7081.

Section 13 - Disposal Considerations

INNER CONTENTS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

OUTER SHELL MATERIAL

There are no special requirements. Observe all federal, state, and local environmental regulations. Non-hazardous, biobased, and biodegradable biopolymer resin is not designed to biodegrade in conventional landfills and is not part of the conventional plastics recycling stream.

Section 14 - Transport Information

INNER CONTENTS

UN Number: None assigned; the substance is not classified as hazardous for transport.

UN Proper Shipping Name: NOT Regulated.

Transport Hazard classes: NOT Regulated.

Packing Group: NOT Regulated.

Transport Environmental Hazards: The substance is not classified as hazardous for transport.

Transport Special Precautions for User: The substance is not classified as hazardous for transport.

Transport in Bulk (MARPOL): The substance is not classified as hazardous for transport.

OUTER SHELL MATERIAL

Not regulated.



Section 15 - Regulatory Information

INNER CONTENTS

HMIS Hazards Ratings: Health 1
Flammability 0
Reactivity 0
Personal Protection: E

OUTER SHELL MATERIAL US FEDERAL

TSCA

Mirel polymers are listed on the TSCA inventory.

EUROPEAN UNION

Not considered hazardous according to EC Directives 67/548/EEC or 1999/45/EC and their valid adaptations and derived national regulations.

Section 16 - Additional Information

INNER CONTENTS

SDS Creation Date: 03/25/2015
SDS Review Date: 03/25/2015

The information contained in this Safety Data Sheet, as of the issue date, is believed to be true and correct. Accuracy or completeness of this information and any recommendations or suggestions are made without warranty or guarantee. Since the conditions of use are beyond the control of the company, it is the responsibility of the user to determine the conditions of safe use of this product. This information does not represent analytical specifications.

OUTER SHELL MATERIAL

MSDS Creation Date: 03/23/2012

No additional information.



Safety Data Sheet

Section 1 - Chemical Product and Company Identification

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Product Name: Healthy Ponds® Blast 2,500 & 25,000; Healthy Ponds® Natural Blast™ 125,000

Other Identifier: Item # 11004, 51131, 50004, 50010, 60008 & 60009

Description: A proprietary blend of naturally occurring, non-pathogenic, non-genetically altered microorganisms on a natural carrier.

Recommended Use: Water Treatment

Form: Powder

Supplier Identification: Bioverse, Inc.
2220 Research Lane,
Worthington, MN 56187
877-948-0303

Website: www.healthyponds.com

Email: support@bioverse.com

Emergency Number: Chemtrec 1-800-424-9300 (Emergency 24 hours); Outside US 1-703-527-3887
Chemtrec Administrative Office Telephone Number 1-800-262-8200

Section 2 – Hazards Identification

Hazard Class: None

Signal Word: None

Hazard Statement: None

Precautionary Statement:

Do not breathe dust. Do not get on skin or clothing. Avoid contact with skin, eyes and clothing. Use with adequate ventilation. Keep container closed and sealed until ready for use. Wash thoroughly after handling. Do not ingest.

Hazard Symbol: None

Section 3 - Composition/Information on Ingredients

CAS#	Chemical Name	EINECS/ELINCS	IUB	% by weight
9000-90-2	Alpha amylase	232-565-6	3.2.1.1	< 0.1%
9012-54-8	Cellulase	232-734-4	3.2.1.4	< 0.1%
9001-82-1	Lipase	232.619..9	3.1.1.3	< 0.01%
9014-01-1	Protease (subtilisin)	232-752-2	3.4.21.62	< 0.05%

Other components: remaining components of this product are proprietary, nonhazardous and/or are present at concentrations below reportable limits.



Section 4 – First Aid Measures

- Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids; get medical aid.
- Skin:** Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.
- Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid immediately. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of water.
- Inhalation:** Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Section 5 – Fire Fighting Measures

Fire Fighting Extinguishing media: Water, foam, chemical and carbon dioxide

Fire Fighting Chemical Hazards: May cause allergic respiratory reaction

Fire Fighting Protective Actions: Not available

Section 6 - Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Contact unnecessary and unprotected personnel from entering area. Provide sufficient ventilation and remove contaminated clothing. Do not walk through spilled material. Avoid breathing dust.

Environmental precautions: Removal by mechanical means (ie vacuuming with HEPA filters) is preferred. Solid can be placed in sealed containers for disposal. Dilute remainder with plenty of water avoiding the formation of aerosols and flush to an approved drain according to local guidelines.

Methods and material for containment and cleaning up: Remove spilled material immediately to reduce the formation of dust using mechanical means (ie vacuuming with HEPA filters) is preferred. Solid can be placed in sealed containers for disposal. Dilute remainder with plenty of water avoiding the formation of aerosols and flush to an approved drain according to local guidelines.

Section 7 - Handling and Storage

Precautions for safe handling: Segregate from acids, peroxides, and combustible organic materials or easily oxidizable materials. Keep from freezing. Protect against physical damage. Keep away from heat and flame.

Conditions for safe storage including any incompatibilities: Keep away from heat and flame. Store in a cool dry area in closed original containers.

Hygiene: not specified



Section 8 - Exposure Controls/Personal Protection

Occupational exposure limits: None established
Biological limit values: None established
Appropriate engineering controls:
Eye/face protective equipment:
Skin protection:
Respiratory protection:

Section 9 - Physical and Chemical Properties

Physical State: Solid
Appearance: Tan free flowing powder
Odor: Fermentation odor
Odor threshold: Not established
pH: Not established.
Freezing/Melting Point: Not established.
Initial boiling point and boiling range: Not available.
Flash Point: Not available.
Evaporation Rate: Not available.
Flammability: Not available
Upper/lower flammability or exposure limits: Not available
Vapor Pressure: Not available.
Vapor Density: Not available
Relative Density: Not established
Solubility: Dispersible in water
Partial coefficient: n-octanol/water: Not available
Auto-ignition temperature: Not available
Decomposition temperature: Not available
Viscosity: Not available
Explosive properties: Not available
Oxidizing properties: Not available

Other Information: No additional information.

Section 10 - Stability and Reactivity

Chemical Stability: Stable.
Hazardous Reactions: None identified
Conditions to Avoid: None known
Incompatible materials: None known
Hazardous decomposition products: None

Section 11 - Toxicological Information

Acute toxicity: Ingestion of this material is not known to result in adverse effects. No specific data available
Skin Corrosion/irritation: this material may be a mild skin irritant.
Serious eye damage/irritation: overexposure to the eye is characterized by irritation
Respiratory or skin sensitization: overexposure by inhalation may cause sensitization and allergic response in hypersensitive individuals; not a skin sensitizer



Germ cell mutagenicity: Not available.
Carcinogenicity: Not listed by IARC, OSHA, or NTP
Reproductive toxicity: No data available
Aspiration hazard: see respiratory sensitization

Section 12 - Ecological Information

Ecotoxicity: No specific data available
Persistence and degradability: No specific data; components are considered to be biodegradable.
Bioaccumulation potential: No specific data available; components considered to be biodegradable will not bioaccumulate.
Mobility in soil: No data available
Results of PBT and vPvB assessment: No specific data available; the substance does not meet the criteria for characterization as either PBT or vPvB
Other adverse effects: None known

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

Section 14 - Transport Information

UN Number: None assigned; the substance is not classified as hazardous for transport.
UN Proper Shipping Name: NOT Regulated.
Transport Hazard classes: NOT Regulated.
Packing Group: NOT Regulated.
Transport Environmental Hazards: The substance is not classified as hazardous for transport.
Transport Special Precautions for User: The substance is not classified as hazardous for transport.
Transport in Bulk (MARPOL): The substance is not classified as hazardous for transport.

Section 15 - Regulatory Information

HMIS Hazards Ratings: Health 1
 Flammability 0
 Reactivity 0
 Personal Protection: E

Section 16 - Additional Information

SDS Creation Date: 03/25/2015
SDS Review Date: 03/25/2015

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SAFETY DATA SHEET



Section 1: IDENTIFICATION

Product name: Blue Powder Pond Colorant

Synonyms / Other names: None.

Product type: Mixture.

Manufacturer/supplier identification:

Company: Bioverse, Inc
2220 Research Lane
Worthington, MN 56187
USA

Telephone No.: 877.948.0303

E-mail: support@bioverse.com

Emergency Telephone No.: Chemtrec 1-800-424-9300 (Emergency 24 hours); Outside US 1-703-527-3887
Chemtrec Administrative Office Telephone Number 1-800-262-8200

Relevant identified uses of the substance or mixture and uses advised against:

Colorant.

Section 2: HAZARD(S) IDENTIFICATION

Hazard classification of the chemical: None.

Pictogram(s):

Signal Word: None

Hazard Statement(s): None.

Precaution Statement(s): None.

Hazards not otherwise classified: *Material has no hazards to classify.*

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

Component Name	Conc. (%)*	CAS #
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*The exact concentration percentage is being withheld as a trade secret. Non-hazardous ingredients are not disclosed.

Section 4: FIRST-AID MEASURES

If ingestion, irritation, any type of overexposure or symptoms of overexposure occurs during or persists after use of this product, contact a POISON CONTROL CENTER, EMERGENCY ROOM OR PHYSICIAN immediately; have Safety Data Sheet information available. Never give anything by mouth

an unconscious or convulsing person.

Route of exposure:	First-aid instructions
Inhalation:	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
Skin:	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use solvents or thinners.
Eye:	Remove contact lenses, irrigate copiously with clean, fresh water, holding the eyelids apart for at least 10 minutes and seek immediate medical advice.
Ingestion:	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting.
Most important symptom or effect:	
Recommendations for immediate medical care:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5: FIRE-FIGHTING MEASURES

Suitable fire-fighting equipment / media:	Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable fire-fighting equipment / media:	None known.
Hazards that may develop during fire:	May produce hazardous combustion by-products.
Special protective actions for fire-fighters:	Use water spray to keep fire-exposed containers cool. Move containers from fire area if this can be done without risk. Isolate the scene by removing all persons from the vicinity of the fire. No action shall be taken involving any personal risk or without suitable training.
Protective equipment for fire-fighters:	Fire-fighters should wear protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode.

Section 6: ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment, and emergency procedures:

For non-emergency personnel:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal
For emergency responders:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable protective equipment. Also heed the precautions in above section: "For non-emergency personnel".

Methods and materials for containment and cleaning up:

For small spills:	Stop leak if without risk. Move containers from spill area. Use spark-proof
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and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

For large spills:

Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows: Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled. See Section 13 for waste disposal.

Environmental precautions:

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Section 7: HANDLING AND STORAGE

Precautions for safe handling:

Do not handle until all safety precautions have been read and understood. Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Empty containers retain product residue and can be hazardous.

Conditions for safe storage and incompatibilities:

Store between the following temperatures: 5 to 35°C (41 to 95°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits:

Component CAS #	Exposure Limits
Product or its dried residues may form Particulates Not Otherwise Regulated (PNOR).	OSHA-PEL: 15 ppm or 10 mg/m ³ (Total Dust) OSHA-PEL: 5 ppm or 5 mg/m ³ (Respirable Fraction)

Appropriate engineering controls:

Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits.

Individual protection measures and Personal Protective Equipment (PPE):

Eye / Face protection:

Safety glasses with side shields.

See: ANSI/ISEA Z87 spectacle specifications.

Skin protection:	Appropriate gloves, footwear, coveralls, impervious clothing, and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing.
Glove selection:	Latex (if not sensitized); Nitrile; Polyvinyl Alcohol (PVA); Chloroprene; or Butyl Rubber gloves should be used. Inspect gloves prior to wearing to be free of defects and replace if they break through.
Respiratory protection:	Respirator selection is based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If workers are exposed to concentrations above the occupational exposure limits, they must use appropriate, certified respirators. If needed, the respirator must be a single use (disposable) or it must be equipped with a quarter-mask, half-mask, helmet / hood, or full facepiece. Air purifying respirators must use N, R, or P series filters. The filter must be NIOSH classification 95, 99, or 100.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid, powder
Color:	Blue
Odor:	Slight
Odor threshold:	Not determined
pH:	Not determined
Melting/Freezing point:	Not determined
Boiling point / range:	Not determined
Flash point:	Not determined
Evaporation rate:	Not determined
Flammability:	Not determined
Lower flammability limits:	Not determined
Upper flammability limits:	Not determined
Vapor pressure:	Not determined
Vapor density:	Not determined
Relative density:	Not determined
Solubilities:	>50 g/l in water
Partition coefficient:	Not determined
Auto-ignition temp.:	Not determined
Decomposition temp.:	Not determined
Viscosity:	Not determined

Section 10: STABILITY AND REACTIVITY

Reactivity:	No specific reactivity is known.
Chemical stability:	No specific instability is known to exist.

Possible hazardous reactions: No specific hazardous reactions known for this material.

Conditions to avoid: No specific conditions to avoid are known.

Incompatible materials: No specific incompatible materials are known.

Hazardous decomposition products: Decomposition of the product or its container may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen and/or respirable dust.

Section 11: TOXICOLOGICAL INFORMATION

Likely routes of exposure:

Inhalation exposure: No specific information on inhalation hazards.

Ingestion exposure: No specific information on ingestion hazards.
Acute toxicity estimate: Oral = 2,500.00 mg/kg bw

Skin contact: No specific information on skin contact hazards.

Eye contact: No specific information on eye exposure.

Overexposure, signs & symptoms:

Immediate, delayed and chronic effects:

Information on acute toxicological effects:

Component CAS	Result	Species	Dose	Exposure
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Listing as a carcinogen:

Component CAS	OSHA	IARC	NTP
No carcinogen component	-	-	-

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity data:

Component CAS	Result	Species	Dose	Exposure
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Persistence and degradability:

Component CAS	Environmental half life (days)	Atmos. Hydrolyation Rate (cm ³ /mol*s)(x10 ⁻¹²)	Metabolic biotransformation in fish, half life (days)
**	*****	*****	0.324

Bioaccumulation potential and soil mobility:

Component CAS	Octanol-Water partition LogPow	Bioconcentration Factor BCF	Soil absorption coefficient Koc (l/Kg)
**	4.755	4.7078	*****

Section 13: DISPOSAL CONSIDERATIONS**Disposal method:**

The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products must comply with the requirements of environmental protection and waste disposal legislation and any national, state, regional or local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

This material and its container must be disposed of in a safe manner. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.

Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid

Section 14: TRANSPORT INFORMATION

	DOT	IMDG	IATA
UN Number:	Not dangerous good.	Not dangerous good.	Not dangerous good.
UN Proper Shipping Name:			
Hazard Class:			
Packing Group:			
Environmental Hazards:			
Marine Pollutant:			

Additional precautions:

When moving within users' premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Section 15: REGULATORY INFORMATION**EPCRA Section 302 (EHS) TPQ:**

Contains no material in Section 302 of EPCRA.

EPCRA Section 304 (EHS) RQ:

Contains no material in Section 304 of EPCRA.

CERCLA RQ: Contains no material in CERCLA.

EPCRA (SARA) Section 313: Contains no material in Section 313 (SARA) of EPCRA.

RCRA Code: Contains no listing in RCRA.

CAA Section 112r TQ: Contains no material in Section 112r of CAA.

TSCA Inventory: All components listed as active on the current TSCA inventory.

California Prop. 65: Contains no material on California Proposition 65 list.

Section 16: OTHER INFORMATION

All information and data appearing on this Safety Data Sheet are believed to be reliable and accurate. However, it is the users responsibility to determine the safety, toxicity, and suitability for own use of the product described. Since the actual use by others is beyond our control, no guarantee, expressed or implied, is made by First Source Worldwide, LLC. User assumes all responsibility.

Date of SDS Preparation: 16 September 2019

Key to abbreviations:

*OSHA - US Occupational Safety and Health Administration.
NIOSH - US National Institute for Occupational Safety and Health.
EPCRA - US Emergency Planning and Community Right-to-Know Act.
CERCLA - US Comprehensive Environmental Response, Compensation and Liability Act.
SARA - US Superfund Amendments and Reauthorization Act.
CAA - US Clean Air Act.
ACGIH - American Conference of Governmental Industrial Hygienists.
CALOSHA - California Division of Occupational Safety and Health.
ANSI - American National Standards Institute.
IARC - International Agency for Research on Cancer.
NTP - US National Toxicology Program.
DOT - US Department of Transportation.
IMDG - International Maritime Dangerous Goods Code.
IATA - International Air Transport Association.
PEL-TWA - Permissible Exposure Limit, Time Weighted Average.
PEL-STEL - Permissible Exposure Limit, Short Term Exposure Limit.
PEL-C - Permissible Exposure Limit, Ceiling.
REL-TWA - Recommended Exposure Limit, Time Weighted Average.
REL-STEL - Recommended Exposure Limit, Short Term Exposure Limit.
REL-C - Recommended Exposure Limit, Ceiling.
TLV-TWA - Threshold Limit Value, Time Weighted Average.
TLV-STEL - Threshold Limit Value, Short Term Exposure Limit.
TLV-C - Threshold Limit Value, Ceiling.
SKIN - Exposure may occur through skin absorption.
CAS # - Chemical Abstracts Service Registry Number.
PPE - Personal Protective Equipment.
EHS - Extremely Hazardous Substance.
TPQ - Threshold Planning Quantity.
TQ - Threshold Quantity.
RQ - Reportable Quantity.
bw - Body Weight.
LD50 - Lethal Dose 50%, median lethal dose.
NOEL - No Observable Effect Level.*