

Safety Data Sheet

LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name: LifeFactors® BronchiaLife™ SAE

Product Number: LS-1066

Company Address: Lifeline Cell Technology
8415 Progress Drive, Suite T
Frederick, MD 21701

Technical Phone: (877) 845-7787

Fax: (443) 393-0393

Emergency Phone: (877) 845-7787

Product use: Cell/Tissue culture

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Principal Components:

LifeFactors® BronchiaLife™ SAE Kit, LS-1066:

L-Alanyl-L-Glutamine, 6 mL, LS-1053

Extract P, 2 mL, LS-1037

PPF, 2.5 mL, LS-1067

TM1, 5 mL, LS-1055

Please refer to Safety Data Sheets (SDS) for the above listed components on the following pages.

Safety Data Sheet

LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name: L-Alanyl-LGlutamine [200 mM]

Product Number: LS-1053

Company Address: Lifeline Cell Technology
8415 Progress Drive, Suite T
Frederick, MD 21701

Technical Phone: (877) 845-7787

Fax: (443) 393-0393

Emergency Phone: (877) 845-7787

Product use: Cell/Tissue culture

SECTION 2 – HAZARDS IDENTIFICATION

Hazardous Components: Not a hazardous substance or mixture

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Principal Components:	L-Alanyl-LGlutamine	CAS number:	39537-23-0
	Water	CAS number:	7732-18-5

Composition: The item formulation is primarily a solution of L-Alanyl-LGlutamine and water. The solution contains 1-5% L-Alanyl-LGlutamine in water.

Synonym: Glutamine-S, Ala-Gln

SECTION 4 – FIRST AID MEASURES

Potential Health Effects:

Eye: May cause irritation of the eye.

Skin: May cause skin irritation.

Ingestion: May be harmful if swallowed.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

First aid measures:

Oral Exposure: If swallowed, rinse out mouth with water provided person is conscious. Call a physician.

Dermal Exposure: In case of contact with skin, flush with copious amounts of water for at least 15 minutes. Should irritation occur, call a physician.

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Safety Data Sheet

SECTION 5 – FIRE FIGHTING MEASURES

- General Fire hazard:** Product does not present any special fire hazard. Carbon oxides may be released in a fire.
- Flash point:** N/A
- Extinguishing media:** Use media appropriate for the material that is burning.
- Advice for Firefighters:** Wear self-contained breathing apparatus if necessary.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal Precautions and Protective Equipment:** Refer to section 8 for appropriate personal protection.
- Environmental Precautions:** No special environmental precautions are required.
- Methods for Clean Up:** Absorb liquid with disposable laboratory towel or other absorbent material and then place in a closed container for disposal. Wash spill site after liquid cleanup is complete with cleansers appropriate for the spill site surface material.

SECTION 7 – HANDLING AND STORAGE

- Precautions for Handling:** Refer to section 8 for appropriate personal protection. Avoid contact with eyes, skin or clothing. Product may cause allergic reaction in sensitized individuals. Do not pipet by mouth.
- Storage:** Keep container tightly closed. Store at -20°C or below. Protect from light.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Exposure limits:** Not listed on the OSHA Occupational Chemical database.
- Engineering Controls:** Eye wash stations are required.
- Ventilation:** Area ventilation is generally adequate.
- Personal Protective Equipment:**
- Respiratory:** Respirator is not required.
- Hand:** Chemical resistant gloves required.
- Eye:** Safety glasses or goggles required.
- Clothing:** Laboratory coat recommended.
- General Hygiene Measures:** Wash hands thoroughly after handling.

SECTION 9 – PHYSICAL / CHEMICAL PROPERTIES

- Appearance:** Frozen, liquid.
- Upper/lower flammability or Explosive limits:** No data available
- Odor:** Odorless
- Vapor pressure:** No data available
- Odor threshold:** No data available

Safety Data Sheet

Vapor density: No data available
pH: No data available
Relative density: No data available
Freezing point: ~0° C
Solubility: Completely soluble in water
Boiling point: ~100° C
Flash point: No data available
Evaporation rate: No data available
Flammability: Not flammable
Upper/lower flammability or explosive limits: No data available
Relative density: No data available
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: No data available
Viscosity: No data available

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: No data available
Chemical stability: Stable under recommended storage and usage conditions.
Possible hazardous reactions: No data available
Conditions to be avoided: No data available
Incompatible materials: Strong oxidizing agents
Hazardous decomposition products: Carbon oxides may be released in a fire.

SECTION 11 – TOXICOLOGICAL INFORMATION

Likely routes of exposure: Ingestion, skin, eye contact.

Acute toxicity

Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other: No data available

Chronic toxicity: No data available

Skin corrosion: No data available
Eye damage: No data available
Sensitization (Respiration or Skin): No data available
Germ cell mutagenicity: No data available
Carcinogenicity: No data available
Reproductive toxicity: No data available
Teratogenicity: No data available

Carcinogenicity

NTP: not listed
IARC: not listed
OSHA: not listed

Safety Data Sheet

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: No data available
Persistence/Degradability: No data available
Bioaccumulation Potential: No data available
Mobility in Soil: No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS

RCRA hazardous waste code: Not listed as a hazardous waste.
Appropriate disposal containers: No specific restrictions on waste container type.
Appropriate Method of Disposal: Clean up and dispose of waste in accordance with all federal, state and local environmental regulations.

SECTION 14 – TRANSPORT INFORMATION

UN number: N/A
Proper Shipping Name: None.
DOT: Non-hazardous for transport.
IMDG: Non-hazardous for transport.
IATA: Non-hazardous for transport.

SECTION 15 – REGULATORY INFORMATION

SARA 302 Components: No chemicals in this product are subject to SARA Title III, Section 302.
SARA 313 Components: This product does not contain chemical components with known CAS numbers that exceed the threshold (De Minimus) reporting levels established by SARA Title III, Section 313.
SARA 311/312: Not a hazardous substance or mixture

Massachusetts Right to Know Components: No components are subject to Massachusetts Right to Know Act.

Pennsylvania Right to Know Components:

L-Alanyl-L-Glutamine	CAS number:	39537-23-0
Water	CAS number:	7732-18-5

New Jersey Right to Know Components:

L-Alanyl-L-Glutamine	CAS number:	39537-23-0
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California Prop. 65 Components: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 – OTHER INFORMATION

Preparation information:

Prepared by: Quality Department
Date Prepared: April 1, 2015
Replaced Version date: July 30, 2012

Disclaimer: This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Lifeline Cell Technology. The data on this sheet relate only to the specific materials designated herein and shall only be used as a guide. Lifeline Cell Technology assumes no legal responsibility for the use or reliance upon these data.

Safety Data Sheet

LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name: Extract-P
Product Number: LS-1037
Company Address: Lifeline Cell Technology
8415 Progress Drive, Suite T
Frederick, MD 21701
Technical Phone: (877) 845-7787
Fax: (443) 393-0393
Emergency Phone: (877) 845-7787
Product use: Cell/Tissue culture

SECTION 2 – HAZARDS IDENTIFICATION

Hazardous Components: Not a hazardous substance or mixture

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Principal Components:
Water CAS number: 7732-18-5

Composition: The item formulation is an extraction of bovine brain tissue (pituitary glands) with salts and water. With the exception of purified water, all ingredients are in concentrations of less than 1%.

Synonym: Bovine Pituitary Extract, BPE

SECTION 4 – FIRST AID MEASURES

Potential Health Effects:

Eye: May cause irritation of the eye.

Skin: May cause skin irritation.

Ingestion: May be harmful if swallowed.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

First aid measures:

Oral Exposure: If swallowed, rinse out mouth with water provided person is conscious. Call a physician.

Dermal Exposure: In case of contact with skin, flush with copious amounts of water for at least 15 minutes. Should irritation occur, call a physician.

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Safety Data Sheet

SECTION 5 – FIRE FIGHTING MEASURES

- General Fire hazard:** Product does not present any special fire hazard. Carbon oxides may be released in a fire.
- Flash point:** N/A
- Extinguishing media:** Use media appropriate for the material that is burning.
- Advice for Firefighters:** Wear self-contained breathing apparatus if necessary.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal Precautions and Protective Equipment:** Refer to section 8 for appropriate personal protection.
- Environmental Precautions:** No special environmental precautions are required.
- Methods for Clean Up:** Absorb liquid with disposable laboratory towel or other absorbent material and then place in a closed container for disposal. Wash spill site after liquid cleanup is complete with cleansers appropriate for the spill site surface material.

SECTION 7 – HANDLING AND STORAGE

- Precautions for Handling:** Refer to section 8 for appropriate personal protection. Avoid contact with eyes, skin or clothing. Product may cause allergic reaction in sensitized individuals. Do not pipet by mouth.
- Storage:** Keep container tightly closed. Store at -20°C or below. Protect from light.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Exposure limits:** Not listed on the OSHA Occupational Chemical database.
- Engineering Controls:** Eye wash stations are required.
- Ventilation:** Area ventilation is generally adequate.
- Personal Protective Equipment:**
- Respiratory:** Respirator is not required.
- Hand:** Chemical resistant gloves required.
- Eye:** Safety glasses or goggles required.
- Clothing:** Laboratory coat recommended.
- General Hygiene Measures:** Wash hands thoroughly after handling.

SECTION 9 – PHYSICAL / CHEMICAL PROPERTIES

- Appearance:** Frozen, red to dark brown, liquid above ~0° C.
- Upper/lower flammability or Explosive limits:** No data available
- Odor:** Slight musky or earthy odor
- Vapor pressure:** No data available
- Odor threshold:** No data available

Safety Data Sheet

Vapor density: No data available
pH: Neutral
Relative density: No data available
Freezing point: ~0° C
Solubility: Completely soluble in water
Boiling point: ~100° C
Flash point: No data available
Evaporation rate: No data available
Flammability: Not flammable
Upper/lower flammability or explosive limits: No data available
Relative density: ~1 at 20° C
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: No data available
Viscosity: No data available

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: No data available
Chemical stability: Stable under recommended storage and usage conditions.
Possible hazardous reactions: No data available
Conditions to be avoided: No data available
Incompatible materials: Strong oxidizing agents
Hazardous decomposition products: Carbon oxides may be released in a fire.

SECTION 11 – TOXICOLOGICAL INFORMATION

Likely routes of exposure: Ingestion, skin, eye contact.

Acute toxicity

Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other: No data available

Chronic toxicity: No data available

Skin corrosion: No data available
Eye damage: No data available
Sensitization (Respiration or Skin): No data available
Germ cell mutagenicity: No data available
Carcinogenicity: No data available
Reproductive toxicity: No data available
Teratogenicity: No data available

Carcinogenicity

NTP: not listed
IARC: not listed
OSHA: not listed

Safety Data Sheet

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: No data available
Persistence/Degradability: No data available
Bioaccumulation Potential: No data available
Mobility in Soil: No data available. Expected to be mobile because it is an aqueous solution.

SECTION 13 – DISPOSAL CONSIDERATIONS

RCRA hazardous waste code: Not listed as a hazardous waste.
Appropriate disposal containers: No specific restrictions on waste container type.
Appropriate Method of Disposal: Clean up and dispose of waste in accordance with all federal, state and local environmental regulations.

SECTION 14 – TRANSPORT INFORMATION

UN number: N/A
Proper Shipping Name: None.
DOT: Non-hazardous for transport.
IMDG: Non-hazardous for transport.
IATA: Non-hazardous for transport.

SECTION 15 – REGULATORY INFORMATION

SARA 302 Components: No chemicals in this product are subject to SARA Title III, Section 302.
SARA 313 Components: This product does not contain chemical components with known CAS numbers that exceed the threshold (De Minimus) reporting levels established by SARA Title III, Section 313.
SARA 311/312: Not a hazardous substance or mixture

Massachusetts Right to Know Components: No components are subject to Massachusetts Right to Know Act.

Pennsylvania Right to Know Components:
Water CAS number: 7732-18-5

New Jersey Right to Know Components: No components are subject to New Jersey Right to Know Act.

California Prop. 65 Components: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 – OTHER INFORMATION

Preparation information:

Prepared by: Quality Department
Date Prepared: February 12, 2015
Replaced Version date: July 30, 2012

Disclaimer: This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Lifeline Cell Technology. The data on this sheet relate only to the specific materials designated herein and shall only be used as a guide. Lifeline Cell Technology assumes no legal responsibility for the use or reliance upon these data.

Safety Data Sheet

LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name: PPF
Product Number: LS-1067
Company Address: Lifeline Cell Technology
8415 Progress Drive, Suite T
Frederick, MD 21701
Technical Phone: (877) 845-7787
Fax: (443) 393-0393
Emergency Phone: (877) 845-7787
Product use: Cell/Tissue culture

SECTION 2 – HAZARDS IDENTIFICATION

Hazardous Components: Not a hazardous substance or mixture.

Hazards not covered by GHS: This product contains raw material of human source. Each batch of Human Serum used in this medium was tested and found to be negative for Hepatitis B, Hepatitis C, HIV-1 and HIV-2 by FDA approved methods. These tests cannot offer complete assurance of the absence of these or other infectious agents.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Principal Components:	Human Serum Albumin	CAS number:	125-04-2
	Water	CAS number:	7732-18-5

Composition: The item formulation is a mixture composed human plasma protein (primarily Human Serum Albumin), water and stabilizing agents. With the exception of purified water and 3-10% HSA, all ingredients are in concentrations of less than 1%.

Synonym: N/A

SECTION 4 – FIRST AID MEASURES

Potential Health Effects:

Eye: May cause irritation of the eye.

Skin: May cause skin irritation.

Ingestion: May be harmful if swallowed.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

First aid measures:

Oral Exposure: If swallowed, rinse out mouth with water provided person is conscious. Call a physician.

Dermal Exposure: In case of contact with skin, flush with copious amounts of water for at least 15 minutes. Should irritation occur, call a physician.

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Safety Data Sheet

SECTION 5 – FIRE FIGHTING MEASURES

- General Fire hazard:** Product does not present any special fire hazard. Carbon oxides may be released in a fire.
- Flash point:** N/A
- Extinguishing media:** Use media appropriate for the material that is burning.
- Advice for Firefighters:** Wear self-contained breathing apparatus if necessary.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal Precautions and Protective Equipment:** Refer to section 8 for appropriate personal protection.
- Environmental Precautions:** No special environmental precautions are required.
- Methods for Clean Up:** Absorb liquid with disposable laboratory towel or other absorbent material and then place in a closed container for disposal. Wash spill site after liquid cleanup is complete with cleansers appropriate for the spill site surface material.

SECTION 7 – HANDLING AND STORAGE

- Precautions for Handling:** Refer to section 8 for appropriate personal protection. Avoid contact with eyes, skin or clothing. Product may cause allergic reaction in sensitized individuals. Do not pipet by mouth.
- Storage:** Keep container tightly closed. Store at -20°C or below. Protect from light.

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Exposure limits:** Not listed on the OSHA Occupational Chemical database.
- Engineering Controls:** Eye wash stations are required.
- Ventilation:** Area ventilation is generally adequate.
- Personal Protective Equipment:**
- Respiratory:** Respirator is not required.
- Hand:** Chemical resistant gloves required.
- Eye:** Safety glasses or goggles required.
- Clothing:** Laboratory coat recommended.
- General Hygiene Measures:** Wash hands thoroughly after handling.

SECTION 9 – PHYSICAL / CHEMICAL PROPERTIES

- Appearance:** Pale yellow or tan, frozen liquid.
- Upper/lower flammability or Explosive limits:** No data available
- Odor:** Faint earthy or musky odor
- Vapor pressure:** No data available
- Odor threshold:** No data available

Safety Data Sheet

Vapor density: No data available
pH: No data available
Relative density: No data available
Freezing point: No data available
Solubility: Soluble in water
Boiling point: No data available
Flash point: No data available
Evaporation rate: No data available
Flammability: Not flammable
Upper/lower flammability or explosive limits: No data available
Relative density: No data available
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: No data available
Viscosity: No data available

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: No data available
Chemical stability: Stable under recommended storage and usage conditions.
Possible hazardous reactions: No data available
Conditions to be avoided: No data available
Incompatible materials: Strong oxidizing agents
Hazardous decomposition products: Carbon oxides may be released in a fire.

SECTION 11 – TOXICOLOGICAL INFORMATION

Likely routes of exposure: Ingestion, skin, eye contact.

Acute toxicity

Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other: No data available

Chronic toxicity: No data available

Skin corrosion: No data available
Eye damage: No data available
Sensitization (Respiration or Skin): No data available
Germ cell mutagenicity: No data available
Carcinogenicity: No data available
Reproductive toxicity: No data available
Teratogenicity: No data available

Carcinogenicity

NTP: not listed
IARC: not listed
OSHA: not listed

Safety Data Sheet

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: No data available
Persistence/Degradability: No data available
Bioaccumulation Potential: No data available
Mobility in Soil: No data available. Expected to be mobile in soil due to high solubility in water.

SECTION 13 – DISPOSAL CONSIDERATIONS

RCRA hazardous waste code: Not listed as a hazardous waste.
Appropriate disposal containers: No specific restrictions on waste container type.
Appropriate Method of Disposal: Clean up and dispose of waste in accordance with all federal, state and local environmental regulations.

SECTION 14 – TRANSPORT INFORMATION

UN number: N/A
Proper Shipping Name: None.
DOT: Non-hazardous for transport.
IMDG: Non-hazardous for transport.
IATA: Non-hazardous for transport.

SECTION 15 – REGULATORY INFORMATION

SARA 302 Components: No chemicals in this product are subject to SARA Title III, Section 302.
SARA 313 Components: This product does not contain chemical components with known CAS numbers that exceed the threshold (De Minimus) reporting levels established by SARA Title III, Section 313.
SARA 311/312: Not a hazardous substance or mixture

Massachusetts Right to Know Components: No components are subject to Massachusetts Right to Know Act.

Pennsylvania Right to Know Components:

Human Serum Albumin	CAS number:	125-04-2
Water	CAS number:	7732-18-5

New Jersey Right to Know Components:

Human Serum Albumin	CAS number:	125-04-2
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California Prop. 65 Components: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 – OTHER INFORMATION

Preparation information:

Prepared by: Quality Department
Date Prepared: February 13, 2015
Replaced Version date: July 30, 2012

Disclaimer: This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Lifeline Cell Technology. The data on this sheet relate only to the specific materials designated herein and shall only be used as a guide. Lifeline Cell Technology assumes no legal responsibility for the use or reliance upon these data.

Safety Data Sheet

LIFELINE CELL TECHNOLOGY SAFETY DATA SHEET

SECTION 1 – PRODUCT AND COMPANY INFORMATION

Product Name: TM1
Product Number: LS-1055
Company Address: Lifeline Cell Technology
8415 Progress Drive, Suite T
Frederick, MD 21701
Technical Phone: (877) 845-7787
Fax: (443) 393-0393
Emergency Phone: (877) 845-7787
Product use: Cell/Tissue culture

SECTION 2 – HAZARDS IDENTIFICATION

Hazardous Components: Not a hazardous substance or mixture

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Principal Components:
Water CAS number: 7732-18-5

Composition: The item formulation is a mixture of biologically active hormones and cytokines, water and stabilizing agents. With the exception of purified water, all ingredients are in concentrations of less than 1%. The concentrations of components of this formulation are considered a trade secret.

Synonym: N/A

SECTION 4 – FIRST AID MEASURES

Potential Health Effects:

Eye: May cause irritation of the eye.

Skin: May cause skin irritation.

Ingestion: May be harmful if swallowed.

Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.

First aid measures:

Oral Exposure: If swallowed, rinse out mouth with water provided person is conscious. Call a physician.

Dermal Exposure: In case of contact with skin, flush with copious amounts of water for at least 15 minutes. Should irritation occur, call a physician.

Eye Exposure: In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Safety Data Sheet

SECTION 5 – FIRE FIGHTING MEASURES

- General Fire hazard:** Product does not present any special fire hazard. Carbon oxides may be released in a fire.
- Flash point:** N/A
- Extinguishing media:** Use media appropriate for the material that is burning.
- Advice for Firefighters:** Wear self-contained breathing apparatus if necessary.
-

SECTION 6 – ACCIDENTAL RELEASE MEASURES

- Personal Precautions and Protective Equipment:** Refer to section 8 for appropriate personal protection.
- Environmental Precautions:** No special environmental precautions are required.
- Methods for Clean Up:** Absorb liquid with disposable laboratory towel or other absorbent material and then place in a closed container for disposal. Wash spill site after liquid cleanup is complete with cleansers appropriate for the spill site surface material.
-

SECTION 7 – HANDLING AND STORAGE

- Precautions for Handling:** Refer to section 8 for appropriate personal protection. Avoid contact with eyes, skin or clothing. Product may cause allergic reaction in sensitized individuals. Do not pipet by mouth.
- Storage:** Keep container tightly closed. Store at -20°C or below. Protect from light.
-

SECTION 8 – EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Exposure limits:** Not listed on the OSHA Occupational Chemical database.
- Engineering Controls:** Eye wash stations are required.
- Ventilation:** Area ventilation is generally adequate.
- Personal Protective Equipment:**
- Respiratory:** Respirator is not required.
- Hand:** Chemical resistant gloves required.
- Eye:** Safety glasses or goggles required.
- Clothing:** Laboratory coat recommended.
- General Hygiene Measures:** Wash hands thoroughly after handling.
-

SECTION 9 – PHYSICAL / CHEMICAL PROPERTIES

- Appearance:** Frozen, clear liquid above ~0° C.
- Upper/lower flammability or Explosive limits:** No data available
- Odor:** slight musky or earthy odor
- Vapor pressure:** No data available
- Odor threshold:** No data available
-

Safety Data Sheet

Vapor density: No data available
pH: Neutral
Relative density: No data available
Freezing point: No data available
Solubility: Completely soluble in water
Boiling point: No data available
Flash point: No data available
Evaporation rate: No data available
Flammability: Not flammable
Upper/lower flammability or explosive limits: No data available
Relative density: No data available
Partition coefficient: n-octanol/water: No data available
Auto-ignition temperature: No data available
Viscosity: No data available

SECTION 10 – STABILITY AND REACTIVITY

Reactivity: No data available
Chemical stability: Stable under recommended storage and usage conditions.
Possible hazardous reactions: No data available
Conditions to be avoided: No data available
Incompatible materials: Strong oxidizing agents
Hazardous decomposition products: Carbon oxides may be released in a fire.

SECTION 11 – TOXICOLOGICAL INFORMATION

Likely routes of exposure: Ingestion, skin, eye contact.

Acute toxicity

Oral LD50: No data available
Inhalation LC50: No data available
Dermal LD50: No data available
Other: No data available

Chronic toxicity: No data available

Skin corrosion: No data available
Eye damage: No data available
Sensitization (Respiration or Skin): No data available
Germ cell mutagenicity: No data available
Carcinogenicity: No data available
Reproductive toxicity: No data available
Teratogenicity: No data available

Carcinogenicity

NTP: not listed
IARC: not listed
OSHA: not listed

Safety Data Sheet

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicity: No data available
Persistence/Degradability: No data available
Bioaccumulation Potential: No data available
Mobility in Soil: No data available. Expected to be mobile because it is an aqueous solution.

SECTION 13 – DISPOSAL CONSIDERATIONS

RCRA hazardous waste code: Not listed as a hazardous waste.
Appropriate disposal containers: No specific restrictions on waste container type.
Appropriate Method of Disposal: Clean up and dispose of waste in accordance with all federal, state and local environmental regulations.

SECTION 14 – TRANSPORT INFORMATION

UN number: N/A
Proper Shipping Name: None.
DOT: Non-hazardous for transport.
IMDG: Non-hazardous for transport.
IATA: Non-hazardous for transport.

SECTION 15 – REGULATORY INFORMATION

SARA 302 Components: No chemicals in this product are subject to SARA Title III, Section 302.
SARA 313 Components: This product does not contain chemical components with known CAS numbers that exceed the threshold (De Minimus) reporting levels established by SARA Title III, Section 313.
SARA 311/312: Not a hazardous substance or mixture

Massachusetts Right to Know Components: No components are subject to Massachusetts Right to Know Act.

Pennsylvania Right to Know Components:
Water CAS number: 7732-18-5

New Jersey Right to Know Components: No components are subject to New Jersey Right to Know Act.

California Prop. 65 Components: This product does not contain any chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 – OTHER INFORMATION

Preparation information:

Prepared by: Quality Department
Date Prepared: February 13, 2015
Replaced Version date: July 30, 2012

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