SDS- Ascorbic Acid Page 1 of 8



1121 5th Street NW Washington, DC 20001 www.edvotek.com

Safety Data Sheet

Version 2 Revision Date 10/31/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Ascorbic Acid

Product Number:

Brand: Edvotek Supplier: Edvotek

1121 5th Street NW Washington, DC

20001

Telephone: 1-800-338-6835

or 202-370-1500

Fax: 202-370-1501

Emergency Phone #:

202-370-1500

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards:

No known OSHA hazards.

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

HMIS Classification:

Health hazard: 0 Flammability: 0 Physical hazard: 0

NFPA Rating:

Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Potential Health Effects:

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation. **Ingestion:** May be harmful if

swallowed.

SDS- Ascorbic Acid Page 2 of 8

3. COMPOSITION/INFORMATION ON INGREDIENTS

No ingredients are hazardous according to OSHA criteria

Synonyms: L-Ascorbic acid

L-Threoascorbic acid Antiscorbutic factor

Vitamin C

Formula: C₆H₈O₆

Molecular weight: 176.12 g/mol

| Chemical name | EC No. | CAS -No | Concentration |
|-----------------|-----------|---------|---------------|
| L-Ascorbic acid | 200-066-2 | 50-81-7 | |

4. FIRST AID MEASURES

General information

No special measures required.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

In case of eye contact

Flush eyes with water as a precaution. Get medical attention immediately if irritation persists.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if symptoms develop.

5. FIREFIGHTING MEASURES

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

SDS- Ascorbic Acid Page 3 of 8

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Carbon oxides

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Prevent skin/eye contact. Use personal protective equipment as needed.

Environmental precautions

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

Methods and materials for containment and cleaning up

Clean up spills immediately. Use absorbent materials if needed and dispose into a chemical waste container.

7. HANDLING AND STORAGE

Precautions for safe handling

No special measures necessary. Good laboratory technique should be used when handling.

Conditions for safe storage

No special measures necessary. Store at room temperature.

Incompatible Products

No known products.

SDS- Ascorbic Acid Page 4 of 8

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Personal protective equipment Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form powder Colour white

Odor no data available

Safety data

pH no data available
Melting point/freezing point no data available
Boiling point no data available
Flash point no data available
Ignition temperature no data available
Autoignition Temperature no data available

SDS- Ascorbic Acid Page 5 of 8

Lower explosion limit no data available
Upper explosion limit no data available
Vapour pressure no data available
Density (water=1) no data available
Water solubility no data available

Partition coefficient:

n-octanol/water no data available
Relative vapour Density no data available
Odour Threshold no data available
Evaporation rate no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No further relevant data available.

Conditions to avoid

No further relevant data available.

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products

No dangerous decomposition products known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity LD/LC50 values

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

SDS- Ascorbic Acid Page 6 of 8

Skin corrosion/irritation

no data available

Carcinogenicity

No components of this product are listed by IARC, ACGIH, NTP and OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available

Aspiration hazard

no data available

Synergistic effects

no data available

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

SDS- Ascorbic Acid Page 7 of 8

13. DISPOSAL CONSIDERATIONS

Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards

No known OSHA hazards

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313.

SARA 311/312Hazards

No SARA Hazards

SDS- Ascorbic Acid Page 8 of 8

16. OTHER INFORMATION

For educational use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

SDS- Assay Mix Page 1 of 8



1121 5th Street NW Washington, DC 20001 www.edvotek.com

Safety Data Sheet

Version 2 Revision Date 10/31/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Assay Mix

Product Number:

Brand: Edvotek Supplier: Edvotek

1121 5th Street NW Washington, DC

20001

Telephone: 1-800-338-6835

or 202-370-1500

Fax: 202-370-1501

Emergency Phone #:

202-370-1500

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards:

No known OSHA hazards.

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

HMIS Classification:

Health hazard: 0 Flammability: 0 Physical hazard: 0

NFPA Rating:

Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Potential Health Effects:

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation. **Ingestion:** May be harmful if

swallowed.

SDS- Assay Mix Page 2 of 8

3. COMPOSITION/INFORMATION ON INGREDIENTS

No ingredients are hazardous according to OSHA

4. FIRST AID MEASURES

General information

No special measures required.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

In case of eye contact

Flush eyes with water as a precaution. Get medical attention immediately if irritation persists.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if symptoms develop.

5. FIREFIGHTING MEASURES

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Oxides of phosphorus, Potassium oxides

SDS- Assay Mix Page 3 of 8

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Prevent skin/eye contact. Use personal protective equipment as needed.

Environmental precautions

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

Methods and materials for containment and cleaning up

Clean up spills immediately. Use absorbent materials if needed and dispose into a chemical waste container.

7. HANDLING AND STORAGE

Precautions for safe handling

No special measures necessary. Good laboratory technique should be used when handling.

Conditions for safe storage

No special measures necessary. Store at room temperature.

Incompatible Products

No known products.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Personal protective equipment Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SDS- Assay Mix Page 4 of 8

Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form liquid Colour white

Odor no data available

Safety data

| рН | no data available |
|------------------------------|-------------------|
| Melting point/freezing point | no data available |
| Boiling point | no data available |
| Flash point | no data available |
| Ignition temperature | no data available |
| Autoignition Temperature | no data available |
| Lower explosion limit | no data available |
| Upper explosion limit | no data available |
| Vapour pressure | no data available |
| Density (water=1) | no data available |
| Water solubility | no data available |
| Partition coefficient: | |

n-octanol/water no data available Relative vapour Density no data available Odour Threshold no data available Evaporation rate no data available SDS- Assay Mix Page 5 of 8

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No further relevant data available.

Conditions to avoid

No further relevant data available.

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products

No dangerous decomposition products known

11. TOXICOLOGICAL INFORMATION

Acute toxicity LD/LC50 values

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Skin corrosion/irritation

no data available

Carcinogenicity

No components of this product are listed by IARC, ACGIH, NTP and OSHA.

Reproductive toxicity

no data available

SDS- Assay Mix Page 6 of 8

Teratogenicity

no data available

Aspiration hazard

no data available

Synergistic effects

no data available

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

Contaminated packaging

Dispose of as unused product.

SDS- Assay Mix Page 7 of 8

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards

No known OSHA hazards

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313.

SARA 311/312Hazards

No SARA Hazards

SDS- Assay Mix Page 8 of 8

16. OTHER INFORMATION

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form liquid Color colorless Odor Odorless

Safety data

no data available Hg Melting point/freezing point no data available Boiling point no data available Flash point no data available Ignition temperature no data available **Autoignition Temperature** no data available Lower explosion limit no data available Upper explosion limit no data available Vapor pressure no data available Density (water=1) no data available Water solubility no data available

Partition coefficient:

n-octanol/water no data available
Relative vapour Density no data available
Odour Threshold no data available
Evaporation rate no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No further relevant data available.

Conditions to avoid

No further relevant data available.

Materials to avoid

Oxidizing agents

Hazardous decomposition products

No known products

11. TOXICOLOGICAL INFORMATION

Acute toxicity LD/LC50 values

no data available

Serious eye damage/eye irritation

no data available

Skin corrosion/irritation

no data available

Reproductive toxicity

no data available

Teratogenicity

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

No components of this product are listed by IARC, ACGIH, NTP and

OSHA.

Aspiration hazard

no data available

Synergistic effects

no data available

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards

Harmful by ingestion. Cause skin irritation

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313.

SARA 311/312Hazards

No SARA Hazards

16. OTHER INFORMATION

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1121 5th Street NW Washington, DC 20001 www.edvotek.com

Safety Data Sheet

Version 2 Revision Date 10/31/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Potassium Telephone: 1-800-338-6835

Phosphate or 202-370-1500

Product Number: Fax: 202-370-1501
Brand: Edvotek Fmergency Phone #:

Brand: Edvotek Emergency Phone #: Supplier: Edvotek 202-370-1500

1121 5th Street NW

Washington, DC

20001

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards:

No known OSHA hazards.

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

HMIS Classification:

Health hazard: 0 Flammability: 0 Physical hazard: 0

NFPA Rating:

Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Potential Health Effects:

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation. **Ingestion:** May be harmful if

swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

No ingredients are hazardous according to OSHA

Synonyms: prim.-Potassium phosphate

Potassium dihydrogen phosphate

Monopotassium phosphate

Formula: H₂KO₄P

Molecular Weight: 136.09 g/mol

| Chemical name | EC No. | CAS -No | Concentration |
|---------------|-----------|-----------|---------------|
| Potassium | 231-913-4 | 7778-77-0 | |
| dihydrogen | | | |
| phosphate | | | |
| | | | |

4. FIRST AID MEASURES

General information

No special measures required.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

In case of eye contact

Flush eyes with water as a precaution. Get medical attention immediately if irritation persists.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if symptoms develop.

5. FIREFIGHTING MEASURES

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Oxides of phosphorus, Potassium oxides

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Prevent skin/eye contact. Use personal protective equipment as needed.

Environmental precautions

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

Methods and materials for containment and cleaning up

Clean up spills immediately. Use absorbent materials if needed and dispose into a chemical waste container.

7. HANDLING AND STORAGE

Precautions for safe handling

No special measures necessary. Good laboratory technique should be used when handling.

Conditions for safe storage

No special measures necessary. Store at room temperature.

Incompatible Products

No known products.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Personal protective equipment Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form liquid Colour white

Odor no data available

Safety data

pH no data available
Melting point/freezing point no data available
Boiling point no data available
Flash point no data available
Ignition temperature no data available

| no data available |
|-------------------|
| no data available |
| |

Partition coefficient:

n-octanol/water no data available Relative vapour Density no data available Odour Threshold no data available Evaporation rate no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No further relevant data available.

Conditions to avoid

No further relevant data available.

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products No dangerous decomposition products

known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity LD/LC50 values

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Skin corrosion/irritation

no data available

Carcinogenicity

No components of this product are listed by IARC, ACGIH, NTP and OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available

Aspiration hazard

no data available

Synergistic effects

no data available

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

13. DISPOSAL CONSIDERATIONS

Other adverse effects

no data available

Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards

No known OSHA hazards

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313.

SARA 311/312Hazards

16. OTHER INFORMATION

No SARA Hazards

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1121 5th Street NW Washington, DC 20001 www.edvotek.com

Safety Data Sheet

Version 2 Revision Date 10/31/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Sodium Hydrosulfite

Product Number:

Brand: Edvotek Supplier: Edvotek

1121 5th Street NW Washington, DC

20001

Telephone: 1-800-338-6835

or 202-370-1500

Fax: 202-370-1501

Emergency Phone #:

202-370-1500

2. HAZARDS IDENTIFICATION

Emergency Overview OSHA Hazards

Acute toxicity

Acute aquatic toxicity

Chronic aquatic toxicity

Self-heating: may catch fire.

Harmful if swallowed.

Toxic to aquatic life.

Toxic to aquatic life with long lasting

effects.

GHS Classification

Self-heating substances and mixtures 1
Acute toxicity, Oral 4

Acute aquatic toxicity 2 Chronic aquatic toxicity 2

Signal Word

Danger

Pictogram







Hazard statement(s)

H251 Self-heating: may catch fire.

H302 Harmful if swallowed.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

264 Wash skin thoroughly after

handling.

P270 Do not eat, drink or smoke when

using this product.

P273 Avoid release to the

environment.

P280 Wear protective gloves/

protective clothing/ eye protection/ face

protection.

P301 + P312 IF SWALLOWED: Call a

POISON CENTER or doctor/ physician

if you feel unwell.

P330 Rinse mouth.

P391 Collect spillage.

P407 Maintain air gap between stacks/

pallets.

P410 Protect from sunlight.

P501 Dispose of contents/ container to an approved waste disposal plant

HMIS Classification:

Health hazard: 2 Flammability: 1 Physical hazard: 2

NFPA Rating:

Health hazard: 2 Fire: 1

Reactivity Hazard: 2

Potential Health Effects:

Inhalation May be harmful if inhaled.

Skin May cause skin irritation. **Eyes** May cause eye burns.

Ingestion Harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms: Sodium dithionite

Sodium hypodisulfite **Formula**: Na₂O₄S₂

Molecular Weight: 174.11 g/mol

| Chemical name | EC No. | CAS -No | Concentration |
|-------------------|-----------|-----------|---------------|
| Sodium dithionite | 231-890-0 | 7775-14-6 | |
| | | | |
| | | | |

3. FIRST AID MEASURES

General information

No special measures required.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

In case of eye contact

Flush eyes with water as a precaution. Get medical attention immediately if irritation persists.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if symptoms develop.

4. FIREFIGHTING MEASURES

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Sulphur oxides, Sodium oxides

5. ACCIDENTAL RELEASE MEASURES

Personal precautions

Prevent skin/eye contact. Use personal protective equipment as needed.

Environmental precautions

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

Methods and materials for containment and cleaning up

Clean up spills immediately. Use absorbent materials if needed and dispose into a chemical waste container.

6. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Good laboratory technique should be used when handling.

Conditions for safe storage

No special measures necessary. Store at room temperature.

Incompatible Products

No known products

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Personal protective equipment Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices

Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form powder Colour colorless

Odor no data available

Safety data

| pH | no data available |
|------------------------------|-------------------|
| Melting point/freezing point | no data available |
| Boiling point | no data available |
| Flash point | no data available |
| Ignition temperature | no data available |
| Autoignition Temperature | no data available |
| Lower explosion limit | no data available |
| Upper explosion limit | no data available |
| Vapour pressure | no data available |
| Density (water=1) | no data available |
| Water solubility | no data available |
| Don't control of | |

Partition coefficient:

n-octanol/water no data available Relative vapour Density no data available Odour Threshold no data available Evaporation rate no data available

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No further relevant data available

Conditions to avoid

No further relevant data available

Materials to avoid

Strong oxidizing agents, acids, Water

Hazardous decomposition products

No dangerous decomposition products

11. TOXICOLOGICAL INFORMATION

Acute toxicity LD/LC50 values

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Skin corrosion/irritation

no data available

Carcinogenicity

No components of this product are listed by IARC, ACGIH, NTP and OSHA.

Reproductive toxicity

no data available

Teratogenicity

no data available

Aspiration hazard

no data available

Synergistic effects

no data available

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

Dispose of unused product, residues, and containers according to local, regional, state, and national regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. REGULATORY INFORMATION

OSHA Hazards

Acute toxicity

Acute aquatic toxicity

Chronic aquatic toxicity

Self-heating: may catch fire.

Harmful if swallowed.

Toxic to aquatic life.

Toxic to aquatic life with long lasting effects.

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the reporting levels established by SARA Title III, Section 313.

SARA 311/312Hazards

No SARA Hazards.

16. OTHER INFORMATION

For educational use only. Not intended for human or animal diagnostic or therapeutic uses.

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRANTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

SDS- Tricine Buffer Page 1 of 8



1121 5th Street NW Washington, DC 20001 www.edvotek.com

Safety Data Sheet

Version 2 Revision Date 10/31/2014

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Tricine Buffer

Product Number:

Brand: Edvotek Supplier: Edvotek

1121 5th Street NW Washington, DC

20001

Telephone: 1-800-338-6835

or 202-370-1500

Fax: 202-370-1501

Emergency Phone #:

202-370-1500

2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards:

No known OSHA hazards.

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS).

HMIS Classification:

Health hazard: 0 Flammability: 0 Physical hazard: 0

NFPA Rating:

Health hazard: 0
Fire: 0
Reactivity Hazard: 0

Potential Health Effects:

Skin: May be harmful if absorbed through skin. May cause skin irritation.

Eyes: May cause eye irritation. **Ingestion:** May be harmful if

swallowed.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

No ingredients are hazardous according to OSHA criteria

Synonyms: N-[Tris(hydroxymethyl)methyl]glycine

Formula: C₆H₁₃NO₅

Molecular Weight: 179.17 g/mol

| Chemical name | EC No. | CAS -No | Concentration |
|------------------------------------|----------|-----------|---------------|
| N- | 227-193- | 5704-04-1 | |
| [Tris(hydroxymethyl)methyl]glycine | 6 | | |

4. FIRST AID MEASURES

General information

No special measures required.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult doctor in case of complaints.

In case of skin contact

Immediately wash off with soap and plenty of water. Get medical attention if symptoms develop.

In case of eye contact

Flush eyes with water as a precaution. Get medical attention immediately if irritation persists.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Get medical attention if symptoms develop.

5. FIREFIGHTING MEASURES

Conditions of flammability

Not flammable or combustible.

Suitable extinguishing media

Use water spray, alcohol resistant foam, dry chemical or carbon dioxide.

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Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products

Carbon oxides, nitrogen oxides (NOx)

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Prevent skin/eye contact. Use personal protective equipment as needed.

Environmental precautions

Dilute with plenty of water. Do not allow to enter sewers/ surface or ground water.

Methods and materials for containment and cleaning up

Clean up spills immediately. Use absorbent materials if needed and dispose into a chemical waste container.

7. HANDLING AND STORAGE

Precautions for safe handling

No special measures necessary. Good laboratory technique should be used when handling.

Conditions for safe storage

No special measures necessary. Store at room temperature.

Incompatible Products

No known products.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Personal protective equipment Respiratory protection

Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

SDS- Tricine Buffer Page 4 of 8

Hand protection

Wear protective gloves. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices.

Eye protection

Avoid eye contact with this material. Wear chemical safety goggles.

Skin and body protection

Use chemical gloves as needed. Use clean protective body covering clothing as needed to minimize contact with clothing and skin.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash and dry hands at the end of workday.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form liquid Colour white

Odor no data available

Safety data

Hq no data available Melting point/freezing point no data available **Boiling point** no data available Flash point no data available Ignition temperature no data available **Autoignition Temperature** no data available Lower explosion limit no data available Upper explosion limit no data available Vapour pressure no data available Density (water=1) no data available Water solubility no data available

Partition coefficient:

n-octanol/water no data available
Relative vapour Density no data available
Odour Threshold no data available
Evaporation rate no data available

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10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No further relevant data available.

Conditions to avoid

No further relevant data available.

Materials to avoid

Strong oxidizing agents.

Hazardous decomposition products

No dangerous decomposition products known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity LD/LC50 values

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Skin corrosion/irritation

no data available

Carcinogenicity

No components of this product are listed by IARC, ACGIH, NTP and OSHA.

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Reproductive toxicity

no data available

Teratogenicity

no data available

Aspiration hazard

no data available

Synergistic effects

no data available

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

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13. DISPOSAL CONSIDERATIONS

Product

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SDS- Tricine Buffer Page 8 of 8

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