



1121 5<sup>th</sup> Street NW  
Washington, DC 20001  
[www.edvotek.com](http://www.edvotek.com)

## Safety Data Sheet

Version 2  
Revision Date 11/16/2017

### 1. PRODUCT AND COMPANY IDENTIFICATION

|                 |  |   |                                   |
|-----------------|--|---|-----------------------------------|
| Product name:   | Acid Rain Simulation Solution  | Telephone:  | 1-800-338-6835<br>or 202-370-1500 |
| Product Number: |  | Fax:  | 202-370-1501                      |
| Brand:          | Edvotek  | Emergency Phone # (For both supplier and Manufacturer): | 202-370-1500                      |
| Supplier:       | Edvotek<br>1121 5 <sup>th</sup> Street NW<br>Washington, DC<br>20001 |   |                                   |

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

#### OSHA Hazards:

Harmful by ingestion. Toxic by skin absorption, Irritant

#### Signal word

Warning

#### Pictogram



#### Hazard statement(s)

**H316** Causes mild skin irritation.

**H319** Causes serious eye irritation.

#### Precautionary statement(s)

**P305 + P351 + P338 IF IN EYES:**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**HMIS Classification:**

Health hazard: 1

Flammability: 0

Physical hazard: 0

**NFPA Rating:**

Health hazard: 1

Fire: 0

Reactivity Hazard: 0

**Potential Health Effects:****Inhalation:** May be harmful if inhaled.  
May cause respiratory tract irritation**Skin-** May be harmful if absorbed.  
through skin. Causes skin irritation.**Eyes:** Causes eye irritation.**Ingestion:** Harmful if swallowed.**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Mixture of the substances listed below with nonhazardous additions.

| Chemical name | EC No.    | CAS –No   | Concentration |
|---------------|-----------|-----------|---------------|
| Sulfuric Acid | 231-639-5 | 7664-93-9 | < 0.002%      |
| Nitric Acid   | 231-714-2 | 7697-37-2 | < 0.05        |
| Water         |           |           |               |

**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

May emit toxic and/or irritating fumes under fire conditions.

## 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

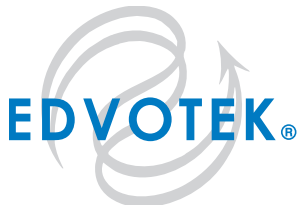
No special measures necessary. Good laboratory technique should be used when handling.

### Conditions for safe storage

No special measures necessary. Store at room temperature.

### Incompatible Products

No known products.



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## Safety Data Sheet

Version 2  
 Revision Date 11/16/2017

### 1. PRODUCT AND COMPANY IDENTIFICATION

|                                 |            |                    |
|---------------------------------|------------|--------------------|
| Product name: Antifungal Powder | Telephone: | 1-800-338-6835     |
| Product Number:                 |            | or 202-370-1500    |
| Brand: Edvotek                  | Fax:       | 202-370-1501       |
| Supplier: Edvotek               |            | Emergency Phone #: |
| 1121 5 <sup>th</sup> Street NW  |            | 202-370-1500       |
| 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: 1  
 Flammability: 0  
 Physical hazard: 0

#### NFPA Rating:

Health hazard: 0  
 Fire: 0  
 Reactivity Hazard: 0

#### Potential Health Effects:

**Inhalation:** May be harmful if inhaled.

**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

**Synonyms** : Fungicidin , Mycostatin

**Formula** : C<sub>47</sub>H<sub>75</sub>NO<sub>17</sub>

**Molecular Weight** : 926.1 g/mol

| Chemical name | EC No.    | CAS –No   | Concentration |
|---------------|-----------|-----------|---------------|
| Nystatin      | 215-749-0 | 1400-61-9 | 100%          |

### 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

Carbon oxides, nitrogen oxides (NO<sub>x</sub>)

## 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

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

### Conditions for safe storage

Recommended storage temperature: -20 °C

**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 |
| 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 agent

### **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, eye irritation, harmful if swallowed, causes skin irritation, causes serious eye irritation, very toxic to aquatic life

**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.

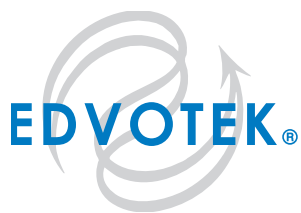
**SARA 311/312 Hazards**

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.



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## Safety Data Sheet

Version 2  
Revision Date 11/16/2017

### 1. PRODUCT AND COMPANY IDENTIFICATION

|                                |            |                    |
|--------------------------------|------------|--------------------|
| Product name: Copper solution  | Telephone: | 1-800-338-6835     |
| Product Number:                |            | or 202-370-1500    |
| Brand: Edvotek                 | Fax:       | 202-370-1501       |
| Supplier: Edvotek              |            | Emergency Phone #: |
| 1121 5 <sup>th</sup> Street NW |            | 202-370-1500       |
| Washington, DC                 |            |                    |
| 20001                          |            |                    |

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

#### OSHA Hazards

Acute toxicity, acute aquatic toxicity, eye irritation, harmful if swallowed, causes skin irritation, causes serious eye irritation, very toxic to aquatic life.

#### Signal Word

Warning

#### Pictogram



#### GHS Classification

Acute toxicity, Oral 4  
Acute aquatic toxicity 1  
Skin irritation 2  
Eye irritation 2A  
Chronic aquatic toxicity 1

**Hazard statement(s)**

**H302** Harmful if swallowed.  
**H315** Causes skin irritation.  
**H319** Causes serious eye irritation.  
**H410** Very toxic to aquatic life with long lasting effects

**Precautionary statement(s)**

**P264** 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/ eye protection/ face protection  
**P301 + P312 IF SWALLOWED:** Call a POISON CENTER or doctor/ physician if you feel unwell.

**P302 + P352 IF ON SKIN:** Wash with plenty of soap and water.

**P305 + P351 + P338 IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**P332 + P313 If skin irritation occurs:** Get medical advice/ attention.

**P337 + P313 If eye irritation persists:** Get medical advice/ attention.

**P362** Take off contaminated clothing and wash before reuse.

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

**HMIS Classification:**

Health hazard: 2  
Flammability: 0  
Physical hazard: 0

**NFPA Rating:**

Health hazard: 2  
Fire: 0  
Reactivity Hazard: 0

**Potential Health Effects:**

**Inhalation** May be harmful if inhaled.  
**Skin** Causes skin irritation.  
**Eyes** Causes eye burns.  
**Ingestion** May be toxic if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : Cupric sulfate

Formula :  $\text{CuO}_4\text{S}$

Molecular Weight : 159.61 g/mol

| Chemical name  | EC No.    | CAS -No   | Concentration |
|----------------|-----------|-----------|---------------|
| Copper Sulfate | 231-847-6 | 7758-98-7 | 15 mg/ml      |

### 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

Sulphur oxides, Borane/boron oxides, Copper 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 | 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 |
| 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**

No further relevant data available.

### **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, eye irritation, harmful if swallowed, causes skin irritation, causes serious eye irritation, very toxic to aquatic life

**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.

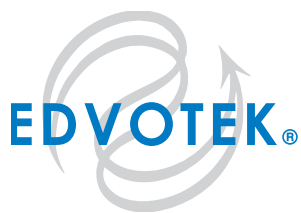
**SARA 311/312 Hazards**

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.**



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## Safety Data Sheet

Version 2  
Revision Date 11/16/2017

### 1. PRODUCT AND COMPANY IDENTIFICATION

|                 |                                |                    |                 |
|-----------------|--------------------------------|--------------------|-----------------|
| Product name:   | Nickel Solution                | Telephone:         | 1-800-338-6835  |
| Product Number: |                                |                    | or 202-370-1500 |
| Brand:          | Edvotek                        | Fax:               | 202-370-1501    |
| Supplier:       | Edvotek                        | Emergency Phone #: | 202-370-1500    |
|                 | 1121 5 <sup>th</sup> Street NW |                    |                 |
|                 | Washington, DC                 |                    |                 |
|                 | 20001                          |                    |                 |

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

#### OSHA Hazards:

Acute toxicity Oral, Acute toxicity Inhalation, Skin irritation  
Respiratory sensitization, Skin sensitization, Germ cell mutagenicity, Carcinogenicity, Reproductive toxicity Specific target organ toxicity , Inhalation Acute aquatic toxicity, Chronic aquatic toxicity.

#### GHS Classification

Acute toxicity Oral 4  
Acute toxicity Inhalation 4  
Skin irritation 2  
Respiratory sensitization 1  
Skin sensitization 1  
Germ cell mutagenicity 2  
Carcinogenicity 1A  
Reproductive toxicity 1B  
Specific target organ toxicity 1  
Inhalation Acute aquatic toxicity 1  
Chronic aquatic toxicity 1

**Signal Word**

Danger

**Pictogram****Hazard statement(s)**

**H302 + H332** Harmful if swallowed or if inhaled

**H315** Causes skin irritation.

**H317** May cause an allergic skin reaction.

**H334** May cause allergy or asthma symptoms or breathing difficulties if inhaled.

**H341** Suspected of causing genetic defects.

**H350** May cause cancer

**H360** May damage fertility or the unborn child.

**H372** Causes damage to organs through prolonged or repeated exposure if inhaled

**H410** Very toxic to aquatic life with long lasting effects.

**Precautionary statement(s)**

**P201** Obtain special instructions before use.

**P202** Do not handle until all safety precautions have been read and understood.

**P264** Wash skin thoroughly after handling.

**P270** Do not eat, drink or smoke when using this product.

**P272** Contaminated work clothing should not be allowed out of the workplace

**P273** Avoid release to the environment

**P280** Wear protective gloves/ protective clothing/ eye protection/ face protection.

**P301 + P312** IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

**P302 + P352** IF ON SKIN: Wash with plenty of soap and water.

**P308 + P313** IF exposed or concerned: Get medical advice/ attention.

**P333 + P313** If skin irritation or rash occurs: Get medical advice/ attention.

**P362** Take off contaminated clothing and wash before reuse.

**P391** Collect spillage. .

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

**HMIS Classification:**

Health hazard: 2

Flammability: 0

Physical hazard: 0

**NFPA Rating:**

Health hazard: 2

Fire: 0

Reactivity Hazard: 0

**Potential Health Effects:**

**Inhalation:** May be harmful if inhaled.

**Skin:** May cause skin irritation.

**Eyes:** May cause eye irritation.

**Ingestion:** Harmful if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**.Formula:** NiO<sub>4</sub>S · 6H<sub>2</sub>O

**Molecular weight:** 262.85 g/mol

| Chemical name               | EC No.    | CAS -No    | Concentration |
|-----------------------------|-----------|------------|---------------|
| Nickel sulphate hexahydrate | 232-104-9 | 10101-97-0 | 15 mg/ml      |

### 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**

No known products

## 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  
Color            green  
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 |
| Vapor pressure                            | no data available |
| Density (water=1)                         | no data available |
| Water solubility                          | no data available |
| Partition coefficient:<br>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**

No further relevant data available.

### **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

**Mobility in soil**

no data available

**Persistence and degradability**

no data available

**PBT and vPvB assessment**

no data available

**Bioaccumulative potential**

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 Oral, Acute toxicity Inhalation, Skin irritation Respiratory sensitization, Skin sensitization, Germ cell mutagenicity, Carcinogenicity, Reproductive toxicity  
Specific target organ toxicity , Inhalation Acute aquatic toxicity, Chronic aquatic toxicity.

### **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 311/312 Hazards**

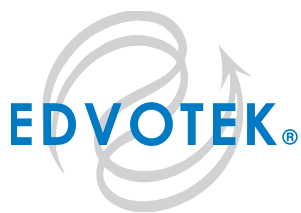
No SARA Hazards.

## 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.



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## Safety Data Sheet

Version 2  
 Revision Date 11/16/2017

### 1. PRODUCT AND COMPANY IDENTIFICATION

|                                   |            |                    |
|-----------------------------------|------------|--------------------|
| Product name: Plant Growth Medium | Telephone: | 1-800-338-6835     |
| Product Number:                   |            | or 202-370-1500    |
| Brand: Edvotek                    | Fax:       | 202-370-1501       |
| Supplier: Edvotek                 |            | Emergency Phone #: |
| 1121 5 <sup>th</sup> Street NW    |            | 202-370-1500       |
| Washington, DC                    |            |                    |
| 20001                             |            |                    |

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

#### GHS Classification

Oxidizing solids  
 Eye irritation  
 Specific target organ toxicity  
 Inhalation  
 Respiratory Tract

#### Signal Word

Warning

#### Pictogram



#### Hazard statement(s)

**H272** May intensify fire; oxidizer.  
**H319** Causes serious eye irritation.  
**H373** May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

**Precautionary statement(s)****P210** Keep away from heat.**P220** Keep/Store away from clothing/ combustible materials.**P221** Take any precaution to avoid mixing with combustibles.**P264** Wash skin thoroughly after handling.**P280** Wear protective gloves/ eye protection/ face protection.**P305 + P351 + P338 IF IN EYES:**  
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.**P314** Get medical advice/ attention if you feel unwell.**P337 + P313** If eye irritation persists: Get medical advice/ attention.**P370 + P378** In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.**P501** Dispose of contents/ container to an approved waste disposal plant**HMIS Classification:**

Health hazard: 2

Flammability: 0

Physical hazard: 2

**NFPA Rating:**

Health hazard: 2

Fire: 0

Reactivity Hazard: 2

**Potential Health Effects:****Inhalation** May be harmful if inhaled.

Causes respiratory tract irritation

**Skin** May be harmful if absorbed through skin. cause skin irritation.**Eyes** May cause eye irritation.**Ingestion** May be harmful if swallowed.**4. COMPOSITION/INFORMATION ON INGREDIENTS**

Mixture of the substances listed bellow.

| Chemical name              | EC No.    | CAS –No    | Concentration |
|----------------------------|-----------|------------|---------------|
| Potassium nitrate          | 231-818-8 | 7757-79-1  | < 4 %         |
| Ammonium nitrate           | 229-347-8 | 6484-52-2  | < 4%          |
| Calcium Chloride           | 233-140-8 | 10043-52-4 | 5-10%         |
| Edetate disodium dihydrate | 205-358-3 | 6381-92-6  | < 4%          |

|                           |           |           |       |
|---------------------------|-----------|-----------|-------|
| Zinc Sulfate heptahydrate | 231-793-3 | 7446-20-0 | < 4%  |
| Sucrose                   | 200-334-9 | 57-50-1   | 30%   |
| Agar                      | 232-658-1 | 9002-18-0 | 0.8 % |

## 5. 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.

## 6. 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**

No data available

**7. 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.

**8. HANDLING AND STORAGE****Precautions for safe handling**

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

**Conditions for safe storage**

Store at 2-8<sup>0</sup>C .

**Incompatible Products**

No known

## 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   | solid             |
| 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 |
| Partition coefficient:<br>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.

### Conditions to avoid

No further relevant data available.

### Possibility of hazardous reactions

No further relevant data available.

### Materials to avoid

No further relevant data available.

### 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

**Mobility in soil**

no data available

**Persistence and degradability**

no data available

**PBT and vPvB assessment**

no data available

**Bioaccumulative potential**

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**

Oxidizing solids

Eye irritation

Specific target organ toxicity

Inhalation

Respiratory Tract

**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.

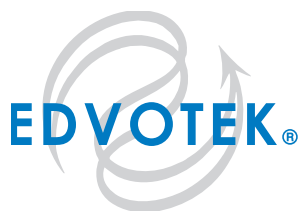
**SARA 311/312 Hazards**

No SARA Hazards.

**16. OTHER INFORMATION**

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Version 1

## Safety Data Sheet

Revision Date 11/16/2017

### 1. PRODUCT AND COMPANY IDENTIFICATION

|                 |                                |                    |                 |
|-----------------|--------------------------------|--------------------|-----------------|
| Product name:   | Salt Solution                  | Telephone:         | 1-800-338-6835  |
| Product Number: |                                |                    | or 202-370-1500 |
| Brand:          | Edvotek                        | Fax:               | 202-370-1501    |
| Supplier:       | Edvotek                        | Emergency Phone #: | 202-370-1500    |
|                 | 1121 5 <sup>th</sup> 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: 1  
Flammability: 0  
Physical hazard: 0

**NFPA Rating:**

Health hazard: 1  
Fire: 0  
Reactivity Hazard: 0

**Potential Health Effects:**

**Inhalation:** May be harmful if inhaled.  
**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

Formula: NaCl

Molecular weight: 58.44 g/mol

No ingredients are hazardous according to OSHA criteria.

| Chemical name | EC No.    | CAS -No   | Concentration |
|---------------|-----------|-----------|---------------|
| NaCl          | 231-598-3 | 7647-14-5 | 150 mg/ml     |

### 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

Hydrogen chloride gas, Sodium 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.

### Incompatible Products

No known products

### Conditions for safe storage

No special measures necessary. Store at room temperature.

## 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            |
| Color | 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 |
| Vapor pressure                            | no data available |
| Density (water=1)                         | no data available |
| Water solubility                          | no data available |
| Partition coefficient:<br>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.

### Conditions to avoid

No further relevant data available.

### Possibility of hazardous reactions

No further relevant data available.

### Materials to avoid

No further relevant data available.

### Hazardous decomposition products

No dangerous decomposition products known.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity LD/LC50 values

no data available

### Respiratory or skin sensitization

no data available

### Serious eye damage/eye irritation

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

**Aspiration hazard**

no data available

**Teratogenicity**

no data available

**Synergistic effects**

no data available

**12. ECOLOGICAL INFORMATION****Toxicity**

no data available

**Mobility in soil**

no data available

**Persistence and degradability**

no data available

**PBT and vPvB assessment**

no data available

**Bioaccumulative potential**

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

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.

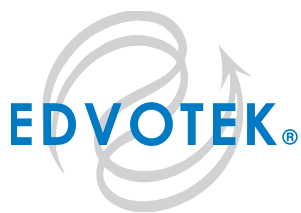
### SARA 311/312 Hazards

No SARA Hazards.

## 16. OTHER INFORMATION

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## Safety Data Sheet

Version 2  
Revision Date 10/31/2014

### 1. PRODUCT AND COMPANY IDENTIFICATION

|                 |                                |                    |                 |
|-----------------|--------------------------------|--------------------|-----------------|
| Product name:   | Tween-20                       | Telephone:         | 1-800-338-6835  |
| Product Number: |                                |                    | or 202-370-1500 |
| Brand:          | Edvotek                        | Fax:               | 202-370-1501    |
| Supplier:       | Edvotek                        | Emergency Phone #: | 202-370-1500    |
|                 | 1121 5 <sup>th</sup> 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

**Synonyms :** Polyoxyethylenesorbitan monolaurate  
Polyethylene glycol sorbitan monolaurate

**CAS-No. :** 9005-64-5

No ingredients are hazardous according to OSHA criteria.

### 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

No known products.

## 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        yellowish  
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 |
| 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**

No further relevant data available.

### **Hazardous decomposition products**

No dangerous decomposition products known.

## 11. TOXICOLOGICAL INFORMATION

### **Acute toxicity LD/LC50 values**

no data available

### **Respiratory or skin sensitization**

no data available

### **Serious eye damage/eye irritation**

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

### **Aspiration hazard**

no data available

### **Teratogenicity**

no data available

### **Synergistic effects**

no data available

## 12. ECOLOGICAL INFORMATION

**Toxicity**

no data available

**Mobility in soil**

no data available

**Persistence and degradability**

no data available

**PBT and vPvB assessment**

no data available

**Bioaccumulative potential**

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

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.

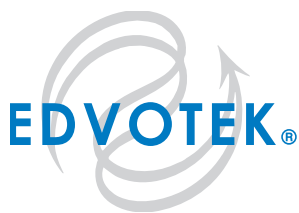
### SARA 311/312 Hazards

No SARA Hazards

## 16. OTHER INFORMATION

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## Safety Data Sheet

Version 2  
 Revision Date 11/16/2017

### 1. PRODUCT AND COMPANY IDENTIFICATION

|                 |  |                    |                                   |
|-----------------|--|--------------------|-----------------------------------|
| Product name:   | Zinc solution  | Telephone:         | 1-800-338-6835<br>or 202-370-1500 |
| Product Number: |  | Fax:               | 202-370-1501                      |
| Brand:          | Edvotek  | Emergency Phone #: | 202-370-1500                      |
| Supplier:       | Edvotek<br>1121 5 <sup>th</sup> Street NW<br>Washington, DC<br>20001 |                    |                                   |

### 2. HAZARDS IDENTIFICATION

#### Emergency Overview

#### OSHA Hazards

Acute toxicity, acute aquatic toxicity, chronic aquatic toxicity, serious eye damage, harmful if swallowed, causes serious eye damage, very toxic to aquatic life with long lasting effects

#### GHS Classification

Acute toxicity, Oral 4  
 Serious eye damage 1  
 Acute aquatic toxicity 1  
 Chronic aquatic toxicity 1

#### Signal Word

Danger

#### Pictogram



**Hazard statement(s)**

**H302** Harmful if swallowed.

**H318** Causes serious eye damage.

**H410** Very toxic to aquatic life with long lasting effects

**Precautionary statement(s)**

**P264** 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/ eye protection/ face protection

**P301 + P312 IF SWALLOWED:** Call a POISON CENTER or doctor/ physician if you feel unwell.

**P305 + P351 + P338 IF IN EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**P362** Take off contaminated clothing and wash before reuse.

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

**HMIS Classification:**

Health hazard: 2

Flammability: 0

Physical hazard: 0

**NFPA Rating:**

Health hazard: 2

Fire: 0

Reactivity Hazard: 0

**Potential Health Effects:**

**Inhalation** May be harmful if inhaled.

**Skin** Causes skin irritation.

**Eyes** Causes eye burns.

**Ingestion** May be toxic if swallowed.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Formula :**  $\text{ZnSO}_4 \cdot 7\text{H}_2\text{O}$

**Molecular Weight :** 287.56 g/mol

| Chemical name             | EC No.    | CAS –No   | Concentration |
|---------------------------|-----------|-----------|---------------|
| Zinc sulfate heptahydrate | 231-793-3 | 7446-20-0 | 150 mg/ml     |

### 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**

Sulphur oxides, Borane/boron oxides, Zinc/zinc 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 | 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 |
| 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 agent

### **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, eye irritation, harmful if swallowed, causes skin irritation, causes serious eye irritation, very toxic to aquatic life

**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 311/312 Hazards**

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.