

MATERIAL SAFETY DATA SHEET

Revision Number A95042F 11/19/2012

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND THE COMPANY / UNDERTAKING

Product name Synonyms Chemical characterization Manufacturer, importer, supplier YSI 7179 Ammonium/ Potassium Check Solution None Dilute aqueous solution of the listed ingredients YSI, Inc 1700/1725 Brannum Lane Yellow Springs, OH 45387 1- 937- 767- 7241

EMERGENCY TELEPHONE NUMBER

2. COMPOSITION / INFORMATION ON INGREDIENTS

| CAS | Chemical Name | % Weight | ACGIH TWA | IARC* | NTP* | OSHA* |
|------------|----------------------------|----------|-----------|-------|------|-------|
| 7732-18-5 | Water | >95 | None | N/A | N/A | N/A |
| 12125-02-9 | Ammonium chloride | <1 | | N/A | N/A | N/A |
| 7447-40-7 | Potassium chloride | <1 | | N/A | N/A | N/A |
| 65-85-0 | Benzoic acid | <1 | | N/A | N/A | N/A |
| 60-00-4 | EDTA | <1 | | N/A | N/A | N/A |
| 6108-17-4 | Lithium acetate, dihydrate | <1 | | N/A | N/A | N/A |

* IARC - Group 1 (Carcinogenic to humans)

* NTP - Report on Carcinogens - Known Carcinogens

* OSHA - Regulated Carcinogens

3. HAZARDS IDENTIFICATION

Emergency Overview

This product contains no substances which at their given concentration, are considered to be hazardous to health.

| Eye Contact | May cause irritation with repeated exposure |
|------------------------------|--|
| Skin Contact | May cause irritation with repeated exposure |
| Inhalation | Inhalation may cause mild irritation of respiratory tract |
| Ingestion | Ingestion of large amounts can cause digestive system upset. |
| General Advice | As with any chemical, use caution when handling |
| Principle Routes of Exposure | Eyes, absorption, ingestion |

| 4. FIRST AID MEASURES | | |
|-------------------------------|---|--|
| General Advice | If exposure symptoms persist, seek medical attention. | |
| Skin Contact | Wash exposed areas with soap and water for 15 minutes | |
| Eye Contact | • Immediately flush with plenty of water. After initial flushing, remove any | |
| | contact lenses and continue flushing for at least 15 minutes | |
| Inhalation | Move to fresh air in case of accidental inhalation | |
| Ingestion | For ingestion of large amounts induce vomiting if person is conscious. | |
| Notes to Physician | Treat symptomatically | |
| Protection of First-Aiders | Use necessary personal protective equipment | |
| Aggravated Medical Conditions | Users with skin conditions (eczema, psoriasis, etc), respiratory conditions (asthma, bronchitis, emphysema, etc), or with chemical sensitivities should take protective precautions | |

| 5. FIRE-FIGHTING MEASURES | |
|---|--------------------------------|
| Flash Point | None |
| Suitable Extinguishing Media | Not applicable to this product |
| Extinguishing media which must not be used for safety reasons | None |
| Specific Hazards | |

| Special exposure hazards rising from the substance or preparation itself, its combustion products, or released gases | • None |
|---|---|
| Special protective equipment for firefighters | None As in any fire, wear self-contained breathing apparatus, and full protective gear |

Specific Methods

| NFPA (National Fire Protection Association) | Health=1 (slight) | Reactivity=0 | Fire=0 | Special=0 (none) |
|--|--------------------|--------------|--------|------------------|
| | ficatin i (slight) | Redetivity 0 | | opeelal e (none) |
| HMIS (Hazardous Material Information System) | Health=1 (slight) | Reactivity=0 | Fire=0 | Special=0 (none) |

| 6. ACCIDENTAL RELEASE MEASURES | | |
|--|------------------------------|--|
| Personal precautions Use necessary personal protective equipment | | |
| Environmental precautions | No information available | |
| Methods for cleaning up | Soak up with inert absorbent | |
| After cleaning, flush away traces with water | | |

| 7. HANDLING AND STORAGE | | |
|----------------------------------|--|--|
| Technical Measures / Precautions | Ensure there is adequate ventilation | |
| Safe Handling Advice | Wash hands immediately after contact to avoid hand-eye transfer. Take | |
| | necessary personal protective precautions before using this product. | |
| <u>Storage</u> | | |
| Technical Measures / Precautions | Store in properly labeled containers | |
| | Keep containers tightly closed. Discard any material that may be | |
| | contaminated or, which may have changed composition. | |
| Incompatible Products | No information available | |

| 8. EXPOSURE CONTROLS / PERSONAL PROTECTION | | |
|--|--|--|
| Engineering measures Ensure adequate ventilation, especially in confined areas Ensure eyewash station is readily available | | |
| Personal protective equipment | | |

Personal protective equipment Wear the appropriate protective gloves Hand Protection ٠ Wear tightly fitting safety goggles or safety glasses with side-shields Eye protection • In case of insufficient ventilation, wear suitable respiratory equipment **Respiratory Protection** ٠ Long sleeved clothing **Skin and Body Protection** • Boots • apron • Handle in accordance with good industrial hygiene and safety practice **Hygiene measures** ٠ Keep away from food, drink, and animal feeding stuffs • No information available **Environmental exposure controls** •

9. PHYSICAL AND CHEMICAL PROPERTIES

| General Information | |
|------------------------------------|------------------------|
| Form | Liquid |
| Appearance | Clear colorless liquid |
| Odor | none |
| Important Health Safety and Enviro | nmental Information |
| рН | 5.2 to 5.5 |
| Boiling Point / Range | 100°C |
| Flash Point | None |
| Vapor Pressure | Equivalent to water |
| Vapor Density | = water vapor |
| Water Solubility | Infinitely soluble |
| Specific Gravity | 1.00 |

| 10. STABILITY AND REACTIVITY | | |
|--|--|--|
| Stability | Stable under normal conditions | |
| Materials to Avoid | None | |
| Hazardous Decomposition Products | lazardous Decomposition Products None | |
| Polymerization • Polymerization does not occur | | |

11. TOXICOLOGICAL INFORMATION

| Local Effects | |
|-----------------------|--|
| Skin Irritation | May cause skin irritation in susceptible persons. |
| Eye Irritation | May cause severe irritation |
| Inhalation | May cause irritation to nasal passages |
| Ingestion | Ingestion of this product may cause digestive system upset |
| Sensitization | No information available |
| Chronic Toxicity | No information available |
| Specific Effects | |
| Carcinogenic Effects | No information available |
| Mutagenic Effects | No information available |
| Reproductive Toxicity | No information available |
| Target Organ Effects | No information available |

| 12. ECOLOGICAL INFORMATION | | | | |
|----------------------------|---------------------------|--|--|--|
| Aquatic Toxicity | No information available. | | | |
| Other Information | | | | |

| Other Information | | | | |
|--|---------------------------|--|--|--|
| Ozone Depletion Potential; ODP; (R-11=1) | No information available. | | | |
| Global Warming Potential (GWP) | No information available. | | | |
| Additional Ecological Information | No information available | | | |
| Mobility | No information available. | | | |
| Bioaccumulative Potential | No information available. | | | |
| Ecotoxicity Effects | No information available | | | |
| Aquatic Toxicity | No information available. | | | |

| 13. DISPOSAL CONSIDERATIONS | | | |
|---------------------------------------|--|--|--|
| Waste From Residues / Unused Products | Dispose of in accordance with local regulations | | |
| Contaminated Packaging | Empty containers should be rinsed and disposed of as | | |
| | appropriate for glass and plastic containers | | |

14. TRANSPORT INFORMATION

DOT

Not regulated

15. REGULATORY INFORMATION

U.S. Inventories

| CAS | Chemical Name | % Weight | ACGIH TWA |
|------------|----------------------------|----------|-----------|
| 7732-18-5 | Water | >95 | None |
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* ACGIH - Occupational Exposure Limits - TWA's

International Inventories

| CAS | Chemical Name | % Weight | EUOED - EU |
|------------|----------------------------|----------|------------|
| 7732-18-5 | Water | >95 | None |
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* EUOED - EU Occupational Exposure Directive (98/24/EC) Indicative Occupational Exposure Limit Values (IOELV)

16. OTHER INFORMATION

Literary Reference Prepared By

None. YSI, Inc.

End of Safety Data Sheet.

MATERIAL SAFETY DATA SHEET - YSI 7179