



## Section 1 Product Description

<b>Product Name</b>	Dissolved Oxygen Electrolyte Solution
<b>Recommended Use</b>	Equipment Calibration
<b>Synonyms</b>	None known
<b>Distributor</b>	Atlas Scientific 43-15 11th Street, Long Island City, NY 11101 718-387-2075
<b>Chemical Information</b>	800-227-1150 (8am-5pm M-F)
<b>Chemtrec</b>	800-424-9300 (Transportation Spill Response 24 hours)

## Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200

Not a dangerous substance according to GHS classification criteria. No known OSHA hazards.

GHS Classification

## Section 3 Composition / Information on Ingredients

Chemical Name	CAS #	%
Water	7732-18-5	70
Sodium Tetraborate	1303-96-4	15
Sodium Chloride	7647-14-5	15

## Section 4 First Aid Measures

### Emergency and First Aid Procedures

<b>Inhalation</b>	In case of accident by inhalation: remove casualty to fresh air and keep at rest.
<b>Eyes</b>	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
<b>Skin Contact</b>	After contact with skin, wash immediately with plenty of water.
<b>Ingestion</b>	If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

## Section 5 Firefighting Procedures

<b>Extinguishing Media</b>	Use media suitable to extinguish surrounding fire.
<b>Fire Fighting Methods and Protection</b>	Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.
<b>Fire and/or Explosion Hazards</b>	Fire or excessive heat may produce hazardous decomposition products.
<b>Hazardous Combustion Products</b>	Phosphorus compounds, Potassium Oxide, Sodium Oxides

## Section 6 Spill or Leak Procedures

<b>Steps to Take in Case Material are Released or Spilled</b>	No health affects expected from the clean-up of this material if contact can be avoided. Follow personal protective equipment recommendations found in Section 8 of this (M)SDS
<b>Environmental Precautions</b>	Avoid breathing material. Avoid contact with skin and eyes. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

## Section 7 Handling and Storage

<b>Handling</b>	Avoid contact with skin and eyes.
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**Storage**  
**Storage Code**

Keep container tightly closed in a cool, well-ventilated place.  
 Green - general chemical storage

## Section 8 Protection Information

Chemical Name	ACGIH		OSHA PEL	
	(TWA)	(STEL)	(TWA)	(STEL)
Sodium Tetraborate	N/A	N/A	N/A	N/A
Sodium Chloride	N/A	N/A	N/A	N/A

**Control Parameters**  
**Engineering Measures**

Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

**Personal Protective Equipment (PPE)**  
**Respiratory Protection**  
**Respirator Type(s)**

Lab coat, apron, eye wash, safety shower.  
 No respiratory protection required under normal conditions of use.  
 None required where adequate ventilation is provided. If airborne concentrations are above the applicable exposure limits, use NIOSH/MSHA approved respiratory protection.  
 Eye Protection Wear chemical splash goggles when handling this product. Have an eye wash station available.

**Skin Protection**

Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

**Gloves**

No information available

## Section 9 Physical Data

**Formula** See Section 3  
**Molecular Weight** No data available  
**Appearance** Colorless Depends upon product selection.  
 The color additives do not affect product hazards. Liquid  
**Odor** None  
**Odor Threshold** No data available  
**Dissolved Oxygen** Electrolyte Solution  
**Melting Point** Estimated 0°C  
**Boiling Point** 100°C  
**Flash Point** No data available  
**Flammable Limits in Air** No data available

**Vapor Pressure** No data available  
**Evaporation Rate (BuAc=1)** No data available  
**Vapor Density (Air=1)** No data available

**Specific Gravity** Approx. 1  
**Solubility in Water** Soluble  
**Log Pow (calculated)** No data available  
**Autoignition Temperature** No data available  
**Decomposition Temperature** No data available  
**Viscosity** No data available  
**Percent Volatile by Volume** No data available

## Section 10 Reactivity Data

**Reactivity**  
**Chemical Stability**  
**Conditions to Avoid**  
**Incompatible Materials**  
**Hazardous Decomposition Products**  
**Hazardous Polymerization**

Not generally reactive under normal conditions.  
 Stable under normal conditions.  
 None known.  
 Water-reactive materials  
 Sodium Oxides, Potassium Oxide, Phosphorus compounds  
 Will not occur



## Section 11 Toxicity Data

**Routes of Entry** Ingestion, skin and eye contact.  
**Symptoms (Acute)** No data available  
**Delayed Effects** No data available

<b>Acute Toxicity</b>	<b>CAS Number</b>	<b>Oral LD50</b>	<b>Dermal LD50</b>	<b>Inhalation LC50</b>
<b>Chemical Name</b> Water	7732-18-5	Oral LD50 Rat 90000 mg/kg		
Sodium Tetraborate	1303-96-4			
Sodium Chloride	7647-14-5			

<b>Carcinogenicity</b>	<b>CAS Number</b>	<b>IARC</b>	<b>NTP</b>	<b>OSHA</b>
<b>Chemical Name</b> Sodium Tetraborate	1303-96-4	Not listed	Not listed	Not listed
Sodium Chloride	7647-14-5	Not listed	Not listed	Not listed

### Chronic Effects

**Mutagenicity** No evidence of a mutagenic effect.  
**Teratogenicity** No evidence of a teratogenic effect (birth defect).  
**Sensitization** No evidence of a sensitization effect.  
**Reproductive** No evidence of negative reproductive effects.  
**Target Organ Effects**  
**Acute** Respiratory system, Cardiovascular system, Musculoskeletal system  
**Chronic** No information available

## Section 12 Ecological Data

**Overview:** This material is not expected to be harmful to the ecology.  
**Mobility:** This material is expected to have high mobility in soil. It absorbs weakly to most soil types.  
**Persistence:** Dissolved into water  
**Bioaccumulation:** Bioconcentration is not expected to occur.  
**Degradability:** No data  
**Other Adverse Effects:** No data

<b>Chemical Name</b>	<b>CAS Number</b>	<b>Eco Toxicity</b>
<b>Water</b>	7732-18-5	No data available
<b>Sodium Tetraborate</b>	1303-96-4	
<b>Sodium Chloride</b>	7647-14-5	

## Section 13 Disposal Information

**Disposal Methods** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.  
**Waste Disposal Code(s)** Not Determined

## Section 14 Transport Information

**Ground - DOT Proper Shipping Name** Not regulated for transport by US DOT.  
**Air - IATA Proper Shipping Name** Not regulated for air transport by IATA.



## Section 15 Regulatory Information

**TSCA Status**

All components in this product are on the TSCA Inventory.

Chemical Name	CAS Name	§ 313 Name	§ 304 RQ	CERCLA RQ	§ 302 TPQ	CAA 112(2) TQ
Sodium Tetraborate	1303-96-4	No	No	No	No	No
Sodium Chloride	7647-14-5	No	No	No	No	No

## Section 16 Additional Information

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The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Atlas Scientific makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

**Glossary**

<b>ACGIH</b>	American Conference of Governmental Industrial Hygienists
<b>CAS</b>	Chemical Abstract Service Number
<b>CERCLA</b>	Comprehensive Environmental Response, Compensation, and Liability Act
<b>DOT</b>	U.S. Department of Transportation
<b>IARC</b>	International Agency for Research on Cancer
<b>N/A</b>	Not Available
<b>NTP</b>	National Toxicology Program
<b>OSHA</b>	Occupational Safety and Health Administration
<b>PEL</b>	Permissible Exposure Limit
<b>ppm</b>	Parts per million
<b>RCRA</b>	Resource Conservation and Recovery Act
<b>SARA</b>	Superfund Amendments and Reauthorization Act
<b>TLV</b>	Threshold Limit Value
<b>TSCA</b>	Toxic Substances Control Act
<b>IDLH</b>	Immediately dangerous to life and health