

Revision Date: 18-June-2018

acc. to OSHA HCS (29CFR 1910.1200) and WHMIS 2015 Regulations

Revision 1

Review Date: 21-Feb-24

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING**Product Identifier**

Product Name Zero Oxygen Solution
Product Number(s) 00653-00
Pure Substance/mixture Mixture

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use Use as laboratory reagent
Uses advised against No information available

Manufacture/Supplier

Cole-Parmer™
North America
625 East Bunker Court
Vernon Hills, IL
60061 USA
Tel: 1-800-323-4340

E-mail address info@coleparmer.com

Made In USA

Emergency Telephone

888-358-4717
8:00 am – 6:00 pm CST

2. HAZARDS IDENTIFICATION**Classification of the substance or mixture****Classification – Mixture****Classification according to Regulation (EC) No. 1272/2008 [CLP]**

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

Classification according to EU Directives 67/548/EEC or 1999/45/EC

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16.

Symbol(s)

Not dangerous goods

Product Identifier

Signal Word - None

EUH210 - Safety data sheet available upon request.

Precautionary Statements

Do not handle until all safety information has been read and understood.

Other Information

No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS-No	Weight %	Trade Secret
Water	7732-18-5	>95 %	*
Sodium Sulfite	7757-83-7	0-5 %	*

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. FIRST AID MEASURES**First Aid Measures**

General Advice	Use first aid treatment according to the nature of the injury. For further assistance, contact your local Poison Control Center. Show this safety data sheet to the doctor in attendance.
Eye Contact	In case of eye contact, remove contact lens and rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin reactions occur, contact a physician.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. If symptoms persist, obtain medical attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Do not include vomiting. Call a physician or Poison Control Center immediately.
Production of First-Aiders	Use personal protective equipment. See Section 8 for more detail. Do not use mouth to mouth method if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical devices.

Most important symptoms and effects, both acute and delayed

Most important symptoms/effects No information available

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

The product is not flammable. Use fire fighting measures that suit the environment

Unsuitable Extinguishing Media

No information available

Specific Hazards Arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal Precautions, Protective Equipment and Emergency Procedures**

Personal Precautions	Use personal protective equipment. Refer to Section 8. Evacuate personnel to safe areas.
Environmental Precautions	Beware of vapors accumulating to form explosives concentrations. Vapors can accumulate in low areas.

Method and Material for Containment and Cleaning Up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. HANDLING AND STORAGE

Precautions for Safe Handling

Handling	To avoid risks to human health and the environment, comply with the instructions for use. Wear personal protective equipment. Avoid breathing dust/fume/gas/mist/vapors/spray Ensure adequate ventilation, especially in confined areas.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.

Conditions for Safe Storage, Including any Incompatibilities

Storage	Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Keep away from direct sunlight.
Incompatible Products	No information available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Components with limit values that require monitoring at the workplace:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace

Engineering Measures

Showers
Eyewash stations
Ventilation systems

Exposure controls

General protective and hygienic measures:

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes and skin.

Breathing equipment: Use suitable respiratory protective device when aerosol or mist is formed.

Protection of hands:



Protective gloves

Material of gloves

Nitrile rubber, NBR

Natural rubber, NR

Butyl rubber, BR

Neoprene gloves

Eye protection:



Safety glasses

Follow relevant national guidelines concerning the use of protective eyewear.

Body protection: Protective work clothing

Limitation and supervision of exposure into the environment

No relevant information available.

Risk management measures No relevant information available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties.

Physical State	Liquid
Appearance	Clear
Odor	None
Odor Threshold	No information available
pH Range	7.5 – 12.0

<u>Property</u>	<u>Values</u>	<u>Remarks * Method</u>
Melting point/freezing point	No information available	
Boiling Point/Range	~100 °C / 212 °F	
Flash Point (High in °C)	N/A	
Evaporation Rate	No information available	
Flammability (solid, gas)	No information available	
Flammability Limit in Air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
Vapor pressure	No information available	
Vapor Density	No information available	
Specific Gravity	No information available	
Water Solubility	soluble	
Solubility in other solvents	No information available	
Partition coefficient	No information available	
Autoignition Temperature		
Decomposition Temperature	No information available	
Kinematic Viscosity	No information available	
Dynamic Viscosity	No information available	
Explosive Properties	No information available	
Oxidizing Properties	No information available	

Other Information

Softening Point	No information available
Molecular Weight	No information available
VOC Content (%)	No information available
Density	No information available
Bulk Density	No information available

10. STABILITY AND REACTIVITY

Reactivity: No relevant information available.

Chemical stability: Stable under normal temperatures and pressures.

Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

Possibility of hazardous reactions

Reacts with strong alkali.

Reacts with certain metals.

Toxic fumes may be released if heated above the decomposition point.

Conditions to avoid Excessive heat.

Incompatible materials No relevant information available.

Hazardous decomposition products

Under fire conditions only:

Toxic metal oxide smoke

Chlorine compounds

Sulfur oxides (SOx)

11. TOXICOLOGICAL INFORMATION**Information on toxicological effects****Acute Toxicity**

Based on available data, the classification criteria are not met.

Production Information

Product does not present an acute toxicity hazard based on known or supplied information.

Inhalation	No information available
Eye Contact	No information available
Skin Contact	No information available
Ingestion	No information available

Component		LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	7732-18-5	LD50 > 90 ml/kg (Rat)	-	-
Sodium Sulfite	7757-83-7	= 820 mg/kg (Rat)	-	>22 mg/L (Rat) 1 h

Information on Toxicological Effects

Symptoms No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization	No information available
Mutagenic Effects	No information available
Carcinogenicity	No information available
Reproductive Effects	No information available
STOT – single exposure	No information available
STOT – repeated exposure	No information available
Aspiration hazard	No information available

Numerical measures of toxicity – Product Information

Unknown Acute Toxicity 0.3% of the mixture consists of ingredient(s) of unknown toxicity.

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 15,185.00 mg/kg

12. ECOLOGICAL INFORMATION**Ecotoxicity**

0.3% of the mixture consists of component(s) of unknown hazards to the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Water Flea
Sodium Sulfite	-	220-460: 96 h Leuciscus idus mg/L LC50 static	330: 24 h Psammecinus miliaris mg/L LC50

Persistence and Degradability - No information available

Bioaccumulation/Accumulation

Component	log Pow
Sodium Sulfite	-4

Results of PBT and vPvB assessment - No information available

Other adverse effects - No information available

Endocrine Disruptor Information - No information available

13. DISPOSAL CONSIDERATIONS**Waste Treatment Methods**

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

Contaminated Packaging Improper disposal or reuse of this container may be dangerous and illegal.

14. TRANSPORT INFORMATION

DOT	Not regulated
ICAO	Not regulated
IATA	Not regulated
IMDG/IMO	Not regulated
RID	Not regulated
ADR	Not regulated

15. REGULATORY INFORMATION**International Inventories**

USINV/TSCA	All ingredients are listed.
CANINV	All ingredients are listed.
EINECS/ELINCS	Does not comply
ENCS	Does not comply
IECSC	Complies
KECL	Does not comply
PICCS	Complies
AICS	Complies

USINV/TSCA – United States Toxic Substances Control Act Section 8(b) Inventory

CANINV/DSL/NDL – Canadian Domestic Substances List/Non-Domestic Substance List

EINECS/ELINCS – European Inventory of Existing Commercial Chemical Substance / EU List of Notified Chemical Substances

ENCS – Japanese Existing and New Chemical Substances

IECSC – Chinese Inventory of Existing Chemical Substances

KECL – Korean Existing and Evaluated Chemical Substances

PICCS – Philippines Inventory of Chemicals and Chemical Substances

AICS – Australian Inventory of Chemical Substances

U.S. Federal Regulations**SARA 302, 355, 313**

None of the ingredients are listed.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

U.S. State Regulations**California Proposition 65**

This product is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

State Right-to-Know

Massachusetts Right-to-Know Act – Substance List No information available

New Jersey Worker and Community Right-to-Know Act	Not listed
Pennsylvania Right-to-Know Act – Hazardous Substance	No information available
Rhode Island Right-to-Know Act	Not listed

U.S. EPA Label Information

No information available

16. OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Date of preparation / last revision - June 18, 2018**Date of Review: February 21, 2024****Abbreviations and acronyms:**

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bio-accumulable, Toxic

vPvB: very Persistent and very Bioaccumulative

OSHA: Occupational Safety & Health Administration

Acute Tox. 4: Acute toxicity – Category 4

Eye Irrit. 2B: Serious eye damage/eye irritation – Category 2B

Resp. Sens. 1: Respiratory sensitisation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Muta. 2: Germ cell mutagenicity – Category 2

Carc. 1B: Carcinogenicity – Category 1B

Repr. 1A: Reproductive toxicity – Category 1A

Repr. 1B: Reproductive toxicity – Category 1B

STOT RE 2: Specific target organ toxicity (repeated exposure) – Category 2