

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 %	*
Cobalt (II) Chloride, Hexahydrate	7791-13-1	0-1 %	*

*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 MEASURESSuitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding 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 MEASURESPersonal 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.

7. HANDLING AND STORAGEPrecautions 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 PROTECTIONControl parameters

Exposure Guidelines

Component	European Union	The United Kingdom	France	Spain	Germany
Cobalt (II) Chloride, Hexahydrate 7791-13-1	-	STEL: 0.3 mg/m ³ 15 min TWA: 0.1 mg/m ³ 8 hr Resp. Sens	-	TWA / VLA-ED: 0.02 mg/m ³ (8 horas)	Haut
Component	Italy	Portugal	The Netherlands	Finland	Denmark
Cobalt (II) Chloride, Hexahydrate 7791-13-1	-	TWA: 0.02 mg/m ³ 8 horas	-	TWA: 0.02 mg/m ³ 8 tunteina	-
Component	Austria	Switzerland	Poland	Norway	Ireland
Cobalt (II) Chloride, Hexahydrate 7791-13-1	Haut	Haut/Peau TWA: 0.05 mg/m ³ 8 Stunden	-	TWA: 0.02 mg/m ³ 8 timer	-

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available

Appropriate Engineering Controls

Engineering Measures Showers
Eyewash stations
Ventilation systems

Individual protection measures, such as personal protective equipment

Eye/face Protection Wear chemical splash goggles. If splashes are likely to occur, wear: Face-shield.

Skin and Body Protection Wear protection gloves/clothing

Respiratory Protection No protective equipment is needed under normal use conditions. In case of inadequate ventilation wear respiratory protection.

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIESInformation 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 information available

Chemical Stability

Stable under normal conditions

Explosion Data

Sensitivity to Mechanical Impact	None
Sensitivity to Static Discharge	None

Possibility of Hazardous Reactions

None under normal processing

Conditions to Avoid

Extremes of temperature and direct sunlight

Incompatible Materials

No information available

Hazardous Decomposition Products

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

11. TOXICOLOGICAL INFORMATION**Information on toxicological effects****Acute Toxicity****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
Cobalt (II) Chloride, Hexahydrate	7791-13-1	=418 mg/kg (Rat)	20 mg/kg (Rat)	-

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 <i>Leuciscus idus</i> mg/L LC50 static	330: 24 h <i>Psammomechinus miliaris</i> mg/L LC50
Cobalt Chloride, Hexahydrate	-	0.569-3.474 mg/l, 96 hours	1.11 mg/l, 48 hours

Persistence and Degradability

No information available

Bioaccumulation/Accumulation

No information available

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**

Waste Disposal Methods Disposal should be in accordance with applicable regional, national and local laws and regulations.

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	Does not comply
CANINV	Does not comply
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/NDSL – 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 313**

Cobalt Chloride, Hexahydrate 7791-13-1

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

CWA (Clean Water Act)

Cobalt Chloride, Hexahydrate 7791-13-1

CERCLA

This material, as supplied, contains one or more substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

Cobalt Chloride, Hexahydrate 7791-13-1

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

Revision Date: 17-April -2018

Disclaimer:

IMPORTANT: The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.