



# SAFETY DATA SHEET

## CORTROL \* IS3070

### 1. Identification

<b>Product identifier</b>	<b>CORTROL IS3070</b>
<b>Other means of identification</b>	None.
<b>Version #</b>	3.3
<b>Prepared by</b>	This SDS has been prepared by SUEZ Regulatory Department (1-215-355-3300).
<b>Revision date</b>	Sep-14-2020
<b>Supersedes date</b>	Aug-27-2019
<b>Recommended use</b>	Oxygen scavenger
<b>Recommended restrictions</b>	Industrial use only.

#### Company/undertaking identification

SUEZ Water Technologies & Solutions Canada  
3239 Dundas Street West  
Oakville, Ontario, L6M 4B2  
T 905-465-3030

#### Emergency telephone

(800) 877-1940

### 2. Hazard identification

<b>Physical hazards</b>	Not classified.	
<b>Health hazards</b>	Serious eye damage/eye irritation	Category 2B
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation

#### Label elements



<b>Signal word</b>	Warning
<b>Hazard statement</b>	Causes eye irritation. May cause respiratory irritation.
<b>Precautionary statement</b>	
<b>Prevention</b>	Avoid breathing mist or vapor. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area.
<b>Response</b>	IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a poison center/doctor if you feel unwell. If eye irritation persists: Get medical advice/attention.
<b>Storage</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
<b>Disposal</b>	Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Other hazards</b>	None known.
<b>Supplemental information</b>	None.

### 3. Composition/information on ingredients

#### Mixtures

Components	CAS #	Percent (wt/wt)
Sodium bisulphite	7631-90-5	10 - 30

### 4. First-aid measures

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
<b>Skin contact</b>	Wash off with soap and water. Get medical attention if irritation develops and persists.
<b>Eye contact</b>	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Ingestion</b>	Do not feed anything by mouth to an unconscious or convulsive victim. Do NOT induce vomiting! Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. May cause respiratory irritation.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

### 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.
<b>Fire fighting equipment/instructions</b>	Move containers from fire area if you can do so without risk. In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Cool containers / tanks with water spray.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	No unusual fire or explosion hazards noted.

### 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.
<b>Methods and materials for containment and cleaning up</b>	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.  Never return spills to original containers for re-use.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

### 7. Handling and storage

<b>Precautions for safe handling</b>	Avoid breathing mist or vapor. Avoid contact with eyes. Avoid prolonged exposure. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Use care in handling/storage.
<b>Conditions for safe storage, including any incompatibilities</b>	Store locked up. Store in original tightly closed container. Protect from freezing.

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value
Sodium bisulphite (CAS 7631-90-5)	TWA	5 mg/m3

#### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Sodium bisulphite (CAS 7631-90-5)	TWA	5 mg/m3

#### Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value
Sodium bisulphite (CAS 7631-90-5)	TWA	5 mg/m3

#### Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
Sodium bisulphite (CAS 7631-90-5)	TWA	5 mg/m3

#### Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Sodium bisulphite (CAS 7631-90-5)	TWA	5 mg/m3

#### Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Type	Value
Sodium bisulphite (CAS 7631-90-5)	TWA	5 mg/m3

#### Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Components	Type	Value
Sodium bisulphite (CAS 7631-90-5)	15 minute	10 mg/m3
	8 hour	5 mg/m3

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Appropriate engineering controls

Provide eyewash station. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

### Individual protection measures, such as personal protective equipment

#### Eye/face protection

Splash proof chemical goggles.

#### Skin protection

##### Hand protection

Wear appropriate chemical resistant gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Glove selection must take into account any solvents and other hazards present.

##### Other

Wear suitable protective clothing.

#### Respiratory protection

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

## 9. Physical and chemical properties

### Appearance

Liquid

### Color

Pink

### Odor

Strong

### Odor threshold

Not available.

### pH (concentrated product)

6.2

<b>pH in aqueous solution</b>	Not available.
<b>Melting point/freezing point</b>	25 °F (-4 °C)
<b>Initial boiling point and boiling range</b>	212 °F (100 °C)
<b>Flash point</b>	> 200 °F (> 93 °C) P-M(CC)
<b>Evaporation rate</b>	< 1 (Ether = 1)
<b>Flammability (solid, gas)</b>	Not applicable.

#### Upper/lower flammability or explosive limits

<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit - upper (%)</b>	Not available.

<b>Vapor pressure</b>	18 mm Hg
<b>Vapor pressure temp.</b>	70 °F (21 °C)
<b>Vapor density</b>	< 1 (Air = 1)
<b>Relative density</b>	1.28
<b>Relative density temperature</b>	70 °F (21 °C)
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	100 %
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	10 cps
<b>Viscosity temperature</b>	70 °F (21 °C)

#### Other information

<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>Pour point</b>	30 °F (-1 °C)
<b>Specific gravity</b>	1.281
<b>VOC</b>	0 % (Calculated)

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur. Contact with acid may generate sulfur dioxide gas.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point. Contact with incompatible materials.
<b>Incompatible materials</b>	Acids. Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Sulfur oxides. Oxides of phosphorus. Oxides of carbon evolved in fire.

## 11. Toxicological information

#### Information on likely routes of exposure

<b>Inhalation</b>	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Prolonged or repeated contact may cause irritation.
<b>Eye contact</b>	Causes eye irritation.
<b>Ingestion</b>	May cause gastrointestinal irritation.

**Symptoms related to the physical, chemical and toxicological characteristics** Irritation of eyes. Exposed individuals may experience eye tearing, redness, and discomfort. May cause respiratory irritation.

**Information on toxicological effects****Acute toxicity** May cause respiratory irritation.

Product	Species	Test Results
CORTROL IS3070 (CAS Mixture)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 5000 mg/kg, (Calculated according to GHS additivity formula)
<i>Inhalation</i>		
LC50	Rat	> 5.5 mg/l, 4 Hours, (Calculated according to GHS additivity formula)
<i>Oral</i>		
LD50	Rat	> 5000 mg/kg, (Calculated according to GHS additivity formula)

Components	Species	Test Results
Sodium bisulphite (CAS 7631-90-5)		
<b>Acute</b>		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Inhalation</i>		
LC50	Rat	> 5.5 mg/l, 4 Hour
<i>Oral</i>		
LD50	Rat	1420 mg/kg

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.**Serious eye damage/eye irritation** Causes eye irritation.**Respiratory or skin sensitization****ACGIH sensitization**Cobalt sulphate (CAS 10124-43-3) Dermal sensitization  
Respiratory sensitization**Canada - Alberta OELs: Irritant**

Sodium bisulphite (CAS 7631-90-5) Irritant

**Canada - Manitoba OELs Hazard: Dermal sensitization**

Cobalt sulphate (CAS 10124-43-3) Dermal sensitization

**Canada - Manitoba OELs Hazard: Respiratory sensitization**

Cobalt sulphate (CAS 10124-43-3) Respiratory sensitization

**Canada - Quebec OELs: Sensitizer**

Cobalt sulphate (CAS 10124-43-3) Sensitizer.

**Respiratory sensitization** This product is not expected to cause respiratory sensitization.**Skin sensitization** This product is not expected to cause skin sensitization.**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.**Carcinogenicity** Not classified.**ACGIH Carcinogens**Cobalt sulphate (CAS 10124-43-3) A3 Confirmed animal carcinogen with unknown relevance to humans.  
Sodium bisulphite (CAS 7631-90-5) A4 Not classifiable as a human carcinogen.**Canada - Manitoba OELs: carcinogenicity**Cobalt sulphate (CAS 10124-43-3) Confirmed animal carcinogen with unknown relevance to humans.  
Sodium bisulphite (CAS 7631-90-5) Not classifiable as a human carcinogen.**Canada - Quebec OELs: Carcinogen category**

Cobalt sulphate (CAS 10124-43-3) Detected carcinogenic effect in animals.

**IARC Monographs. Overall Evaluation of Carcinogenicity**

Sodium bisulphite (CAS 7631-90-5) 3 Not classifiable as to carcinogenicity to humans.

## US. National Toxicology Program (NTP) Report on Carcinogens

Cobalt sulphate (CAS 10124-43-3)

Reasonably Anticipated to be a Human Carcinogen.

<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Based on available data, the classification criteria are not met.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

## 12. Ecological information

### Ecotoxicity

Product	Species	Test Results	
CORTROL IS3070 (CAS Mixture)			
<b>Aquatic</b>			
Crustacea	0% Mortality	Daphnia magna	62.5 mg/L, Static Renewal Bioassay, 48 hour
	LC50	Daphnia magna	354 mg/L, Static Renewal Bioassay, 48 hour
Fish	LC50	Fathead Minnow	379 mg/L, Static Renewal Bioassay, 96 hour
	NOEL	Fathead Minnow	250 mg/L, Static Renewal Bioassay, 96 hour

**Bioaccumulative potential** No data available.

**Mobility in soil** No data available.

**Other adverse effects** Not available.

### Persistence and degradability

- COD (mgO<sub>2</sub>/g) 41 (calculated data)

## 13. Disposal considerations

**Disposal instructions** Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

**Local disposal regulations** Dispose in accordance with all applicable regulations.

**Waste from residues / unused products** Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

**Contaminated packaging** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

### TDG

Not regulated as dangerous goods.

The goods described above have been classified using a combination of testing, technical data, calculations and manufacturer knowledge in accordance with Part 2, Classification. TDG Classification is valid for road or rail transport only. For shipment by air or water, refer to IATA or IMDG regulations.

### DOT

**UN number** UN3082

**UN proper shipping name** Environmentally hazardous substance, liquid, n.o.s. (SODIUM BISULFITE), RQ(SODIUM BISULFITE, NICKEL SULFATE)

### Transport hazard class(es)

**Class** 9

**Packing group** III

**ERG number** 171

Some containers may be exempt from Dangerous Goods/Hazmat Transport Regulations, please check BOL for exact container classification.

**IMDG**

**UN number** UN3082  
**UN proper shipping name** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SODIUM BISULFITE), RQ(SODIUM BISULFITE, NICKEL SULFATE)  
**Transport hazard class(es)**  
**Class** 9  
**Subsidiary risk** -  
**Packing group** III  
**Environmental hazards**  
**Marine pollutant** No.  
**EmS** F-A, S-F  
**Special precautions for user** Not available.

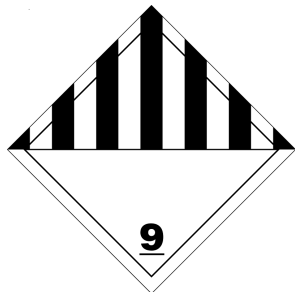
**IATA**

Not regulated as dangerous goods.

**DOT**



**IMDG**



**15. Regulatory information**

**Canadian regulations**

**Canada NPRI (Supplier Notification Required): Listed substance**

Cobalt sulphate (CAS 10124-43-3) Listed.

**Controlled Drugs and Substances Act**

Not regulated.

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

Not listed.

**Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)**

Cobalt sulphate (CAS 10124-43-3)

**Precursor Control Regulations**

Not regulated.

**Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

**NSF Registered and/or meets  
USDA (according to 1998  
guidelines):**

Registration No. – 141469  
Category Code(s):  
G5 Cooling and retort water treatment products  
G6 Boiler treatment products, steam line products – food contact

## 16. Other information

**Issue date** Jun-16-2016  
**Revision date** Sep-14-2020  
**Version #** 3.3  
**NFPA ratings** Health: 2  
Flammability: 0  
Instability: 0

**NFPA ratings**



**List of abbreviations**

ACGIH: American Conference of Governmental Industrial Hygienists  
BOD: Biochemical Oxygen Demand  
CAS: Chemical Abstract Service Registration Number  
COD: Chemical Oxygen Demand  
DOT: Department of Transportation (49 CFR 172.101).  
GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
NFPA: National Fire Protection Association  
IARC: International Agency for Research on Cancer.  
IATA: International Air Transport Association  
IMDG: International Maritime Dangerous Goods Code  
HMIRA: Hazardous Materials Information Review Act (Canada).  
HPR: Hazardous Products Regulations (Canada).  
LC50: Lethal Concentration, 50%  
LD50: Lethal Dose, 50%  
NOEL: No Observed Effect Level  
OSHA: Occupational Safety & Health Administration.  
STEL: Short Term Exposure Limit  
TDG: Transportation of Dangerous Goods Regulations, Canada  
TOC: Total Organic Carbon  
TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.  
TWA: Time Weighted Average  
WHMIS: Workplace Hazardous Materials Information System.

**References:**

No data available

**Disclaimer**

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.

**Revision information**

Composition / Information on Ingredients: Ingredients  
GHS: Classification

\* Trademark of SUEZ. May be registered in one or more countries.