



# Material Safety Data Sheet

Issue Date: 15-SEP-2011  
Supersedes: 19-JUN-2009

CORTROL IS3000

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## 1 Identification

**Identification of substance or preparation**  
CORTROL IS3000

**Product Application Area**  
Water based dissolved oxygen scavenger.

**Company/Undertaking Identification**  
GE Betz, Inc.  
4636 Somerton Road  
Trevose, PA 19053  
T 215 355-3300, F 215 953 5524

**Emergency Telephone**  
(800) 877-1940

Prepared by Product Stewardship Group: T 215-355-3300    Prepared on: 15-SEP-2011

## 2 Hazard(s) identification

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**EMERGENCY OVERVIEW**

**WARNING**

May cause slight irritation to the skin. Skin sensitizer. Severe irritant to the eyes. May cause irritation to mucous membranes. Repeated exposure may result in respiratory sensitization.

DOT hazard: Environmentally hazardous substance: RQ  
Odor: Strong; Appearance: Pink, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus(full face-piece type). Proper fire-extinguishing media: dry chemical, carbon dioxide, foam or water

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**POTENTIAL HEALTH EFFECTS**

**ACUTE SKIN EFFECTS:**

Primary route of exposure; May cause slight irritation to the skin. Skin sensitizer.

**ACUTE EYE EFFECTS:**

Severe irritant to the eyes.

**ACUTE RESPIRATORY EFFECTS:**

May cause irritation to mucous membranes. Repeated exposure may

result in respiratory sensitization.

**INGESTION EFFECTS:**

May cause gastrointestinal irritation. Very large doses may cause diarrhea, depression, colic and death. May also cause severe allergic reactions in sensitive individuals.

**TARGET ORGANS:**

Prolonged or repeated exposures may cause primary irritant dermatitis, skin sensitization, and/or allergic respiratory reactions.

**MEDICAL CONDITIONS AGGRAVATED:**

Asthma.

**SYMPTOMS OF EXPOSURE:**

May cause local irritation or a sensitization reaction upon direct contact with skin or respiratory tract.

### 3 Composition / information on ingredients

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation. This product is subject to the Pennsylvania and New Jersey Worker and Community Right to Know Law.

**HAZARDOUS INGREDIENTS:**

Cas#	Chemical Name	Range (w/w%)
7646-79-9	COBALT CHLORIDE Toxic (by ingestion); sensitizer (skin); possible human carcinogen (IARC=2B); potential reproductive toxin	0.1-1.0
7631-90-5	SODIUM BISULFITE May be corrosive in aqueous solutions; irritant; sensitizer (skin and respiratory); may generate SO <sub>2</sub> ; IARC=3 (carcinogen status not classifiable)	30-60

**NON-HAZARDOUS INGREDIENTS:**

CAS#	CHEMICAL NAME
7732-18-5	WATER
7757-82-6	SODIUM SULFATE

### 4 First-aid measures

**SKIN CONTACT:**

Wash thoroughly with soap and water. Remove contaminated clothing. Thoroughly wash clothing before reuse. Get medical attention if irritation develops or persists.

**EYE CONTACT:**

Remove contact lenses. Hold eyelids apart. Immediately flush eyes with plenty of low-pressure water for at least 15 minutes. Get immediate medical attention.

**INHALATION:**

Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get immediate medical attention.

**INGESTION:**

Do not feed anything by mouth to an unconscious or convulsive victim. Do not induce vomiting. Immediately contact physician. Dilute contents of stomach using 2-8 fluid ounces (60-240 mL) of milk or water.

**NOTES TO PHYSICIANS:**

No special instructions

## 5 Fire-fighting measures

**FIRE FIGHTING INSTRUCTIONS:**

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

**EXTINGUISHING MEDIA:**

dry chemical, carbon dioxide, foam or water

**HAZARDOUS DECOMPOSITION PRODUCTS:**

elemental oxides

**FLASH POINT:**

> 200F > 93C P-M(CC)

**MISCELLANEOUS:**

Environmentally hazardous substance: RQ

NA 3082;Emergency Response Guide #171

## 6 Accidental release measures

**PROTECTION AND SPILL CONTAINMENT:**

Ventilate area. Use specified protective equipment. Contain and absorb on absorbent material. Place in waste disposal container.

Flush area with water. Wet area may be slippery. Spread sand/grit.

**DISPOSAL INSTRUCTIONS:**

Water contaminated with this product may be sent to a sanitary sewer treatment facility, in accordance with any local agreement, a permitted waste treatment facility or discharged under a permit. Product as is - Incinerate or land dispose in an approved landfill.

## 7 Handling and storage

**HANDLING:**

Vent carefully before opening. Sulfur dioxide can be formed during the normal use and handling of this product.

**STORAGE:**

Keep containers closed when not in use. Protect from freezing. If frozen, thaw and mix completely prior to use. Shelf life 180 days.

## 8 Exposure controls / personal protection

**EXPOSURE LIMITS****CHEMICAL NAME**

COBALT CHLORIDE

PEL (OSHA): LIMITS HAVE NOT BEEN ESTABLISHED BY US OSHA.

TLV (ACGIH): TWA = 0.02 MG/M3; A3 (Cobalt and inorganic compounds, as Co)

SODIUM BISULFITE

PEL (OSHA): LIMITS HAVE NOT BEEN ESTABLISHED BY US OSHA.

TLV (ACGIH): TWA = 5 MG/M3; A4

**ENGINEERING CONTROLS:**

Adequate ventilation to maintain air contaminants below exposure limits.

**PERSONAL PROTECTIVE EQUIPMENT:**

Use protective equipment in accordance with 29CFR 1910 Subpart I

**RESPIRATORY PROTECTION:**

A RESPIRATORY PROTECTION PROGRAM THAT MEETS OSHA'S 29 CFR 1910.134 AND ANSI Z88.2 REQUIREMENTS MUST BE FOLLOWED WHENEVER WORKPLACE CONDITIONS WARRANT A RESPIRATOR'S USE.

USE AIR PURIFYING RESPIRATORS WITHIN USE LIMITATIONS ASSOCIATED WITH THE EQUIPMENT OR ELSE USE SUPPLIED AIR-RESPIRATORS.

If air-purifying respirator use is appropriate, use a respirator with acid gas cartridges and dust/mist prefilters.

**SKIN PROTECTION:**

gauntlet-type rubber, butyl or neoprene gloves, chemical resistant apron -- Wash off after each use. Replace as necessary.

**EYE PROTECTION:**

splash proof chemical goggles, face shield

## 9 Physical and chemical properties

Spec. Grav. (70F,21C)	1.261	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	18	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-8		
Viscosity(cps 70F,21C)	7	% Solubility (water)	100.0

Odor	Strong
Appearance	Pink
Physical State	Liquid
Flash Point	P-M(CC) > 200F > 93C
pH As Is (approx.)	3.2
Evaporation Rate (Ether=1)	< 1.00
Percent VOC:	0.0

NA = not applicable      ND = not determined

## 10 Stability and reactivity

**CHEMICAL STABILITY:**

Stable under normal storage conditions.

**POSSIBILITY OF HAZARDOUS REACTIONS:**

No known hazardous reactions.

**INCOMPATIBILITIES:**

May react with strong oxidizers.

**DECOMPOSITION PRODUCTS:**

elemental oxides

## 11 Toxicological information

Oral LD50 RAT: 3030 mg/kg  
NOTE - Calculated value according to GHS additivity formula  
Skin Irritation Score RABBIT: 0-2.95  
NOTE - Repeated studies indicate little or no irritation; not DOT  
corrosive  
Eye Irritation Score RABBIT: 2.0  
NOTE - Maximum score at 1 hour; completely reversible by 48 hours

## 12 Ecological information

### AQUATIC TOXICOLOGY

Daphnia magna 48 Hour Static Screen  
100% Mortality= 500; 0% Mortality= 100 mg/L  
Fathead Minnow 96 Hour Acute Toxicity (Estimated)  
LC50= 210; No Effect Level= 150 mg/L  
Rainbow Trout 48 Hour Static Screen  
100% Mortality= 1000; 0% Mortality= 500 mg/L

### BIODEGRADATION

No Data Available.

## 13 Disposal considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :  
Not applicable.

Please be advised; however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material.

## 14 Transport information

Transportation Hazard: Environmentally hazardous substance: RQ  
DOT: ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S.(SODIUM  
BISULFITE SOLUTION)  
9, NA 3082, PG III, RQ  
DOT EMERGENCY RESPONSE GUIDE #: 171  
Note: Some containers may be DOT exempt, please check BOL for  
exact container classification  
IATA: Not Regulated  
  
IMDG: Not Regulated

## 15 Regulatory information

### TSCA:

All components of this product are included on or are in compliance with the U.S. TSCA regulations.

### CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):

1,443 gallons due to SODIUM BISULFITE;

### FOOD AND DRUG ADMINISTRATION:

ALL ingredients in this product are authorized in 21CFR173.310

for use as boiler water additives where the steam may contact food.

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

Registration number: 141465

Category Code(s):

- G8 Cooling and retort water treatment products - all food processing areas except meat and poultry
- G9 Boiler treatment products - all food processing areas except meat and poultry/food contact

**SARA SECTION 312 HAZARD CLASS:**

Immediate(acute);Delayed(Chronic)

**SARA SECTION 302 CHEMICALS:**

No regulated constituent present at OSHA thresholds

**SARA SECTION 313 CHEMICALS:**

No regulated constituent present at OSHA thresholds

**CALIFORNIA REGULATORY INFORMATION**

**CALIFORNIA SAFE DRINKING WATER AND TOXIC**

**ENFORCEMENT ACT (PROPOSITION 65):**

No regulated constituents present

**MICHIGAN REGULATORY INFORMATION**

No regulated constituent present at OSHA thresholds

## 16 Other information

HMIS vII		CODE TRANSLATION
Health	2	Moderate Hazard
Fire	0	Minimal Hazard
Reactivity	0	Minimal Hazard
Special	NONE	No special Hazard
(1) Protective Equipment	D	Goggles,Face Shield,Gloves,Apron

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

**CHANGE LOG**

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
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MSDS status:	25-SEP-1997		** NEW **
	15-JUN-2000	4	25-SEP-1997
	16-JUN-2006	2, 7, 16	15-JUN-2000
	13-JUN-2008	2, 5, 14	16-JUN-2006
	19-JUN-2009	8	13-JUN-2008
	15-SEP-2011	11	19-JUN-2009