

GE Water & Process Technologies

Material Safety Data Sheet

SPECTRUS OX909

Issue Date: 08-FEB-2013 Supercedes: 09-NOV-2010

1 Identification

Identification of substance or preparation SPECTRUS OX909

Product Application Area Biocide

Company/Undertaking Identification GE Betz, Inc.

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Emergency Telephone

(800) 877-1940

Prepared by Product Stewardship Group: T 215-355-3300 Prepared on: 08-FEB-2013

2 Hazard(s) identification

EMERGENCY OVERVIEW

DANGER

Corrosive to skin. Corrosive to the eyes. Mists/aerosols cause irritation to the upper respiratory tract.

DOT hazard: Corrosive to skin Odor: Mild; Appearance: Yellow-Orange, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus(full face-piece type). Proper fire-extinguishing media: Flood with water. Use of CO2 or foam may not be effective.

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; Corrosive to skin.

ACUTE EYE EFFECTS:

Corrosive to the eyes.

ACUTE RESPIRATORY EFFECTS:

Mists/aerosols cause irritation to the upper respiratory tract.

INGESTION EFFECTS:

May cause severe irritation or burning of the gastrointestinal tract.

TARGET ORGANS:

Prolonged or repeated exposures may cause primary irritant dermatitis and/or tissue necrosis.

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

Causes severe irritation, burns or tissue ulceration with subsequent scarring.

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.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range(w/w%)
PROPRIETARY	HALOGENATED COMPLEX Strong oxidizer; corrosive	15-40
13845-18-6	SODIUM SULPHAMIDATE Potential irritant	15-40
1310-73-2	SODIUM HYDROXIDE Corrosive; toxic (by ingestion)	7-13

4 First-aid measures

SKIN CONTACT:

URGENT! Wash thoroughly with soap and water. Remove contaminated clothing. Get immediate medical attention. Thoroughly wash clothing before reuse.

EYE CONTACT:

URGENT! Immediately flush eyes with water for 30 minutes while removing contact lenses. Hold eyelids apart. 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. If vomiting occurs naturally have victim lean forward to reduce risk of aspiration.

NOTES TO PHYSICIANS:

Probable mucosal damage may contraindicate the use of gastric lavage.

5 Fire-fighting measures

FIRE FIGHTING INSTRUCTIONS:

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

EXTINGUISHING MEDIA:

Flood with water. Use of CO2 or foam may not be effective.

HAZARDOUS DECOMPOSITION PRODUCTS:

oxides of carbon, hydrogen chloride and hydrogen bromide

FLASH POINT:

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

MISCELLANEOUS:

Corrosive to skin
UN3266; Emergency Response Guide #154

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 with water. Spread sand/grit. Do not use organic materials.

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:

Oxidizer. Avoid all contact with reducing agents, oils, greases, organics and acids. Corrosive to skin and/or eyes.

STORAGE:

Shelf life = 270 days. Store between 40 and 100F (4 and 38C). Avoid excessive heat and contamination. Store only in vented containers. Avoid exposure to direct sunlight. Store away from acids. Do not store in steel or aluminum containers.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

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HALOGENATED COMPLEX

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

TLV (ACGIH): LIMITS HAVE NOT BEEN ESTABLISHED BY ACGIH.

SODIUM SULPHAMIDATE

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

TLV (ACGIH): LIMITS HAVE NOT BEEN ESTABLISHED BY ACGIH.

SODIUM HYDROXIDE

PEL (OSHA): 2 MG/M3

TLV (ACGIH): TWA (Ceiling) = 2 MG/M3
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ENGINEERING CONTROLS:

Adequate ventilation to maintain air contaminants below exposure

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 any of the following particulate respirators: N95, N99, N100, R95, R99, R100, P95, P99 or P100.

SKIN PROTECTION:

gauntlet-type nitrile 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) Freeze Point (F) Freeze Point (C)	1.347 21 -6	<pre>Vapor Pressure (mmHG) Vapor Density (air=1)</pre>	~ 18.0 1.10
Viscosity(cps 70F,21C)	9	% Solubility (water)	100.0
Odor Appearance Physical State Flash Point P- pH As Is (approx.) Evaporation Rate (Ether Percent VOC:	-M(CC)	Mild Yellow-Orange Liquid > 200F > 93C 13.0 < 1.00 0.0	

NA = not applicable ND = not determined

10 Stability and reactivity

CHEMICAL STABILITY:

Stable under normal storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS:

Contact with strong acids may cause a violent reaction releasing heat. Shock, friction, heat or other sources of ignition may cause a violent reaction releasing heat and toxic fumes. Contact with reducing agents or flammable/combustible material may cause fire or explosion. Contact with metals may cause a violent reaction releasing heat and toxic gas.

INCOMPATIBILITIES:

May react with organics or acids.

DECOMPOSITION PRODUCTS:

oxides of carbon, hydrogen chloride and hydrogen bromide

11 Toxicological information

Oral LD50 RAT:
Dermal LD50 RABBIT:
Inhalation LC50 RAT:

2,491 mg/kg >2,000 mg/kg >20.37 mg/L

12 Ecological information

AQUATIC TOXICOLOGY

Bluegill Sunfish 96 Hour Static Acute Bioassay
 LC50= 3.8 mg/L
Daphnia magna 48 Hour Static Acute Bioassay
 EC50= 4.8 mg/L
Menidia medidia (Silversides) 96 Hour Flow-Thru Bioassay
 LC50= 2.3 mg/L
Rainbow Trout 96 Hour Static Acute Bioassay
 LC50= 3 mg/L
Selenastrum (algae) 96 Hour Growth Inhibition
 EC50= 2.6 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: D002=Corrosive(pH).

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

15 Regulatory information

TSCA:

This is an EPA registered biocide and is exempt from TSCA inventory requirements.

CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):

900 gallons due to SODIUM HYDROXIDE;

FIFRA REGISTRATION NUMBER:

3377-55-3876

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

Registration number: 140719

Category Code(s):

G5 Cooling and retort water treatment products - all

food processing areas

G7 Boiler treatment products - all food processing areas/nonfood 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

Health	3	Serious Hazard
Fire	0	Minimal Hazard
Reactivity	0	Minimal Hazard
Special	CORR	DOT corrosive
(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
MSDS status:	14-OCT-2003		** NEW **
	10-DEC-2003	15	14-OCT-2003
	08-APR-2005	13	10-DEC-2003
	26-MAY-2006	8	08-APR-2005
	17-DEC-2007	14	26-MAY-2006
	24-JUN-2009	10,15	17-DEC-2007
	12-FEB-2010	14	24-JUN-2009
	09-NOV-2010	3,4,5,7,8,10	12-FEB-2010
	08-FEB-2013	7	09-NOV-2010