



# Material Safety Data Sheet

Issue Date: 03-OCT-2011  
Supercedes: 19-OCT-2009

SPECTRUS OX1201

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## 1 Identification

**Identification of substance or preparation**  
SPECTRUS OX1201

**Product Application Area**  
Water-based microbial control agent.

**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: 03-OCT-2011

## 2 Hazard(s) identification

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**EMERGENCY OVERVIEW**

**CAUTION**

Non-hazardous to skin. May cause moderate irritation to the eyes.  
Mists/aerosols may cause irritation to upper respiratory tract.

DOT hazard is not applicable  
Odor: Slight; Appearance: Colorless, 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; Non-hazardous to skin.

**ACUTE EYE EFFECTS:**

May cause moderate irritation to the eyes.

**ACUTE RESPIRATORY EFFECTS:**

Mists/aerosols may cause irritation to upper respiratory tract.

**INGESTION EFFECTS:**

May cause gastrointestinal irritation.

**TARGET ORGANS:**

No evidence of potential chronic effects.

**MEDICAL CONDITIONS AGGRAVATED:**

Not known.

**SYMPTOMS OF EXPOSURE:**

May cause redness or itching of skin.

### 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%)
7647-15-6	SODIUM BROMIDE Irritant	30-60

**NON-HAZARDOUS INGREDIENTS:**

CAS#	CHEMICAL NAME
7732-18-5	WATER

### 4 First-aid measures

**SKIN CONTACT:**

Wash thoroughly with soap and water. Remove contaminated clothing. 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:**

If nasal, throat or lung irritation develops - remove to fresh air and get 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:**

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:**

dry chemical, carbon dioxide, foam or water

**HAZARDOUS DECOMPOSITION PRODUCTS:**

hydrogen bromide

**FLASH POINT:**

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

## 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. Contaminated area may be washed down with water.

**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 - Dispose of in approved pesticide facility or according to label instructions.

## 7 Handling and storage

**HANDLING:**

Normal chemical handling.

**STORAGE:**

Keep containers closed when not in use. Protect from freezing. Do not store at elevated temperatures. Shelf life 360 days.

## 8 Exposure controls / personal protection

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

SODIUM BROMIDE

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

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

**ENGINEERING CONTROLS:**

adequate ventilation

**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:**

rubber, butyl, viton or neoprene gloves -- Wash off after

each use. Replace as necessary.

**EYE PROTECTION:**

splash proof chemical goggles

## 9 Physical and chemical properties

Spec. Grav. (70F,21C)	1.403	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	< -30	Vapor Density (air=1)	< 1.00
Freeze Point (C)	< -34		
Viscosity(cps 70F,21C)	12	% Solubility (water)	100.0
Odor		Slight	
Appearance		Colorless	
Physical State		Liquid	
Flash Point	P-M(CC)	> 200F > 93C	
pH As Is (approx.)		7.5	
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:**

Solid sodium bromide may react with easily oxidizable materials.

**DECOMPOSITION PRODUCTS:**

hydrogen bromide

## 11 Toxicological information

Oral LD50 RAT:	>5000 mg/kg
NOTE - Calculated value according to GHS additivity formula	
Reproductive Toxicity RAT:	4,800 mg/kg/day
NOTE - 3-Generation: decreased fertility	
Dermal LD50 RABBIT:	>5000 mg/kg
NOTE - Calculated value according to GHS additivity formula	
Skin Irritation Score RABBIT:	0
Eye Irritation Score RABBIT:	16

## 12 Ecological information

**AQUATIC TOXICOLOGY**

Bluegill Sunfish 96 Hour Static Acute Bioassay (As Bromine)  
LC50= .52; No Effect Level= .3 mg/L  
Bluegill Sunfish 96 Hour Static Acute Bioassay (Product as is)  
LC50 Greater Than= 1000 mg/L  
Daphnia magna 48 Hour Static Acute Bioassay (As Bromine)  
LC50= .71; No Effect Level= .41 mg/L

Daphnia magna 48 Hour Static Acute Bioassay (Product as is)  
LC50= 27500 mg/L  
Mysid Shrimp 96 Hour Flow-Thru Bioassay (As Bromine)  
LC50= .17 mg/L  
Rainbow Trout 96 Hour Static Acute Bioassay (As Bromine)  
LC50= .23 mg/L  
Rainbow Trout 96 Hour Static Acute Bioassay (Product as is)  
LC50 Greater Than= 1000 mg/L  
Sheepshead Minnow 96 Hour Flow-Thru Bioassay (As Bromine)  
LC50= .19; No Effect Level= .11 mg/L  
No Data Available.

#### **BIODEGRADATION**

Product contains only inorganics that are not subject to typical biological degradation. Assimilation by microbes may occur in waste treatment or the environment.

## **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: Not Applicable  
DOT: Not Regulated

DOT EMERGENCY RESPONSE GUIDE #: Not applicable  
Note: Some containers may be DOT exempt, please check BOL for exact container classification  
IATA: Not Regulated

IMDG: Not Regulated

## **15 Regulatory information**

#### **TSCA:**

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

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

No regulated constituent present at OSHA thresholds

#### **FIFRA REGISTRATION NUMBER:**

3876- 159

#### **FOOD AND DRUG ADMINISTRATION:**

The ingredients in this product are approved by FDA under 21 CFR 176.300.

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

Registration number: 141071  
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)

**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	1	Slight Hazard
Fire	0	Minimal Hazard
Reactivity	0	Minimal Hazard
Special	NONE	No special Hazard
(1) Protective Equipment	A	Safety Glasses

(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:	10-DEC-1997		** NEW **
	09-SEP-1998	15	10-DEC-1997
	05-NOV-2001	3,4,8,10	09-SEP-1998
	28-JAN-2009	4,5,7,8,10	05-NOV-2001
	17-JUN-2009	15	28-JAN-2009
	19-OCT-2009	15	17-JUN-2009
	03-OCT-2011	11	19-OCT-2009