



# Material Safety Data Sheet

Issue Date: 25-APR-2011  
Supersedes: 26-JAN-2010

## SPECTRUS NX1105

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### 1 Identification

**Identification of substance or preparation**  
SPECTRUS NX1105

**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: 25-APR-2011

### 2 Hazard(s) identification

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**EMERGENCY OVERVIEW**

**DANGER**

Corrosive to skin. Absorbed by skin. Potential skin sensitizer.  
Corrosive to the eyes. Vapors, gases, mists and/or aerosols cause irritation to the upper respiratory tract. Respiratory sensitization may occur.

DOT hazard: Corrosive to skin  
Odor: Slight Acid; 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; Corrosive to skin. Absorbed by skin. Potential skin sensitizer.

**ACUTE EYE EFFECTS:**

Corrosive to the eyes.

**ACUTE RESPIRATORY EFFECTS:**

Primary route of exposure;Vapors, gases, mists and/or aerosols cause irritation to the upper respiratory tract. Respiratory sensitization may occur.

**INGESTION EFFECTS:**

Highly Toxic;  
May cause severe irritation or burning of mouth, throat, and gastrointestinal tract with severe chest and abdominal pain, nausea, vomiting, diarrhea, lethargy and collapse. Possible death when ingested in large doses or aspirated.

**TARGET ORGANS:**

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

**MEDICAL CONDITIONS AGGRAVATED:**

Asthma, allergies, skin disorders, and chronic respiratory disease.

**SYMPTOMS OF EXPOSURE:**

Inhalation may cause eye, nose, throat and lung irritation and possible respiratory sensitization or asthma. Skin contact may cause moderate irritation to severe burns and sensitization.

### 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%)
111-30-8	GLUTARALDEHYDE Toxic (by ingestion); corrosive (eyes, and skin); potential sensitizer (skin and respiratory), absorbed by skin	40-70

### 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 flush eyes continuously with lukewarm, gently flowing 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.

Rinse mouth with plenty of water. Dilute contents of stomach using 4-10 fluid ounces (120-300 mL) of milk or water.

**NOTES TO PHYSICIANS:**

Material is corrosive. It may not be advisable to induce vomiting. Possible mucosal damage may contraindicate the use of gastric lavage. Aspiration into the lungs will result in chemical pneumonia and may be fatal.

## 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:**

oxides of carbon

**FLASH POINT:**

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

**MISCELLANEOUS:**

Corrosive to skin

UN 3265;Emergency Response Guide #153

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

## 7 Handling and storage

**HANDLING:**

Acidic. Corrosive(Skin/eyes). Do not mix with alkaline material.

**STORAGE:**

Store below 100F ( 38C). Keep containers closed when not in use. Store in cool ventilated location. Store away from oxidizers. Shelf life 360 days.

## 8 Exposure controls / personal protection

**EXPOSURE LIMITS**

**CHEMICAL NAME**

GLUTARALDEHYDE

PEL (OSHA): 0.2 PPM(CEILING)

TLV (ACGIH): 0.05 PPM(CEILING)

MISC: Manufacturer's recommended exposure limit 0.1 ppm (ceiling).

**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 organic vapor and HEPA cartridges.

**SKIN PROTECTION:**

gauntlet-type butyl or 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)	1.116	Vapor Pressure (mmHG)	14.7
Freeze Point (F)	1	Vapor Density (air=1)	> 1.00
Freeze Point (C)	-17		
Viscosity(cps 70F,21C)	28	% Solubility (water)	100.0

Odor	Slight Acid
Appearance	Colorless
Physical State	Liquid
Flash Point P-M(CC)	> 200F > 93C
pH As Is (approx.)	3.5
Evaporation Rate (Ether=1)	< 1.00
Percent VOC:	45.0

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 amines, ammonia, acids, bases, strong oxidizers and metals.

**DECOMPOSITION PRODUCTS:**

oxides of carbon

## 11 Toxicological information

Oral LD50 RAT:	1330 mg/kg
Dermal LD50 RABBIT:	1,004-1,360 mg/kg
Inhalation LC50 RAT:	> 22 ppm
Skin Sensitization G.PIG:	POSITIVE

## 12 Ecological information

### AQUATIC TOXICOLOGY

Bluegill Sunfish 96 Hour Static Acute Bioassay  
LC50= 24.8; No Effect Level= 11 mg/L  
Daphnia magna 21 Day Chronic Bioassay  
Reproduction NOEL= 9.7 mg/L  
Daphnia magna 48 Hour Static Renewal Bioassay  
LC50= 23.6; No Effect Level= 17 mg/L  
Eastern Oyster Larvae 96 Hour Flow-Thru Bioassay  
EC50 Shell Deposition= 1.73; No Effect Level= .35 mg/L  
Fathead Minnow 32 Day Early Life Stage Test  
LOEC= 6.6; No Effect Level= 3.2 mg/L  
Fathead Minnow 96 Hour Static Acute Bioassay  
LC50= 13; No Effect Level= 8.6 mg/L  
Mysid Shrimp 96 Hour Flow-Thru Bioassay  
LC50= 15.7; No Effect Level= 1.7 mg/L  
Rainbow Trout 96 Hour Static Renewal Bioassay  
LC50= 24; No Effect Level= 17 mg/L  
Sheepshead Minnow 96 Hour Flow-Thru Bioassay  
LC50= 71; No Effect Level= 53 mg/L

### BIODEGRADATION

BOD-28 (mg/g): 500  
BOD-5 (mg/g): 0  
COD (mg/g): 981  
TOC (mg/g): 315

## 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: Corrosive to skin  
DOT: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS GLUTARALDEHYDE)  
8, UN 3265, PG II  
DOT EMERGENCY RESPONSE GUIDE #: 153  
Note: Some containers may be DOT exempt, please check BOL for exact container classification  
IATA: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS GLUTARALDEHYDE)  
8, UN 3265, PG II  
IMDG: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (CONTAINS GLUTARALDEHYDE)  
8, UN 3265, PG II

## 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:**

464-692-3876

**FOOD AND DRUG ADMINISTRATION:**

The ingredients in this product are approved by FDA under 21 CFR 176.170, 176.300 and 173.320.

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

Registration number: 144534

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

**HMIS vII**

**CODE TRANSLATION**

Health	3	Serious Hazard
Fire	1	Slight Hazard
Reactivity	0	Minimal Hazard
Special	CORR	DOT corrosive
(1) Protective Equipment	X	Ask Your Supervisor

(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:	09-OCT-1997		** NEW **
	20-MAY-1998	15	09-OCT-1997
	06-JUL-1998	3	20-MAY-1998
	29-JUL-1998	12	06-JUL-1998
	09-JUL-1999	11	29-JUL-1998
	24-SEP-1999	2,3,4;EDIT:6	09-JUL-1999
	12-OCT-2000	3,11	24-SEP-1999
	22-AUG-2001	4	12-OCT-2000
	09-SEP-2004	15	22-AUG-2001

15-NOV-2004	11	09-SEP-2004
26-OCT-2007	4, 5, 7, 10, 14	15-NOV-2004
24-JUL-2008	4	26-OCT-2007
28-OCT-2008	4	24-JUL-2008
26-JAN-2010	4, 7, 8, 10, 11, 14	28-OCT-2008
25-APR-2011	15	26-JAN-2010