GE
Water & Process Technologies

Material Safety Data Sheet

Issue Date: 25-MAY-2011
Supercedes: 04-FEB-2011

SPECTRUS CT1300

1 Identification

Identification of substance or preparation
SPECTRUS CT1300

Product Application Area
Water-based microbial control agent.

Company/Undertaking Identification
GE Betz, Inc.
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Trevose, PA 19053
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Emergency Telephone
(800) 877-1940

Prepared by Product Stewardship Group: T 215-355-3300 Prepared on: 25-MAY-2011

2 Hazard(s) identification

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EMERGENCY OVERVIEW

DANGER

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

DOT hazard: Corrosive to skin, Flammable
Odor: Mild; Appearance: Colorless To Yellow, Liquid

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

ACUTE SKIN EFFECTS:
Primary route of exposure; Corrosive to skin. Potential skin sensitizer.

ACUTE EYE EFFECTS:
Corrosive to the eyes.

ACUTE RESPIRATORY EFFECTS:
Vapors, gases, mists and/or aerosols may cause irritation to upper

respiratory tract.

INGESTION EFFECTS:
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 very large doses.

TARGET ORGANS:
Prolonged or repeated exposures may cause CNS depression, tissue narcoses, skin sensitization, and/or toxicity to the liver and kidney.

MEDICAL CONDITIONS AGGRAVATED:
Not known.

SYMPTOMS OF EXPOSURE:
Inhalation of vapors/mists/aerosols may cause eye, nose, throat and lung irritation. Skin contact may cause severe irritation or burns.

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%)
68424-85-1	ALKYL(C12-C16) DIMETHYLBENZYLAMMONIUM CHLORIDE Corrosive (eyes and skin); toxic (by ingestion)	40-70
64-17-5	ETHANOL Flammable liquid; irritant (eyes); may cause CNS depression; potential liver, kidney, brain, heart and male reproductive toxin; produced mutagenic effects in germ cells and somatic cells (in vivo)	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 plenty of low-pressure water for at least 20 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. Dilute contents of stomach. Induce vomiting by one of the standard methods. Immediately contact a physician.

NOTES TO PHYSICIANS:

Material is corrosive. It may not be advisable to induce vomiting. Possible 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 or foam--Avoid water if possible.

HAZARDOUS DECOMPOSITION PRODUCTS:

oxides of carbon and nitrogen, hydrogen chloride

FLASH POINT:

130F 54C P-M(CC)

MISCELLANEOUS:

Corrosive to skin, Flammable
UN 2920;Emergency Response Guide #132

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. Remove ignition sources. Flush area with water. 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:

Combustible. Corrosive to skin and/or eyes. Bond and ground containers during filling or discharge. Do not use near sparks, flames or sources of ignition.

STORAGE:

Shelf life = 360 days. Keep containers closed when not in use. Store in cool ventilated location. Store away from oxidizers. Keep away from flames or sparks.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

ALKYL(C12-C16) DIMETHYLBENZYLAMMONIUM CHLORIDE
PEL (OSHA): LIMITS HAVE NOT BEEN ESTABLISHED BY US OSHA.
TLV (ACGIH): LIMITS HAVE NOT BEEN ESTABLISHED BY ACGIH.

ETHANOL
PEL (OSHA): 1000 PPM (1900 MG/M3)
TLV (ACGIH): STEL = 1,000 PPM; A3
MISC: NIOSH REL = 1000 PPM (1900 MG/M3); NIOSH IDLH = 3300 PPM

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

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)	0.965	Vapor Pressure (mmHG)	44.0
Freeze Point (F)	-7	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-22		
Viscosity(cps 70F,21C)	73	% Solubility (water)	100.0

Odor		Mild
Appearance		Colorless To Yellow
Physical State		Liquid
Flash Point	P-M(CC)	130F 54C
pH As Is (approx.)		8.9
Evaporation Rate (Ether=1)		< 1.00
Percent VOC:		ND

NA = not applicable ND = not determined

10 Stability and reactivity

CHEMICAL STABILITY:
Stable under normal storage conditions.

POSSIBILITY OF HAZARDOUS REACTIONS:
Friction, heat or other sources of ignition may cause a violent reaction releasing heat and toxic fumes. Contact with oxidizers may cause fire or explosion.

INCOMPATIBILITIES:
May react with strong oxidizers.

DECOMPOSITION PRODUCTS:
oxides of carbon and nitrogen, hydrogen chloride

11 Toxicological information

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Oral LD50 RAT:                          4260 mg/kg
      NOTE - Calculated value according to GHS additivity formula
Skin Sensitization G.PIG:               NEGATIVE
      NOTE - Active component was neither a photoallergen nor a skin
      sensitizer
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12 Ecological information

AQUATIC TOXICOLOGY

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      Annelida(Lumbriculus variegatus) 96 Hour Acute Toxicity
         LC50= 1.47; LC10= .37 mg/L
      Benthic Crustacean(Gammerus pseutolimnaeus) 96 Hour Acute
      Toxicity
         LC50= .07  mg/L
      Ceriodaphnia 48 Hour Static Renewal Bioassay
         LC50= .35; No Effect Level= .15 mg/L
      Ceriodaphnia 7 Day Chronic Bioassay
         IC25 = .098  mg/L
      Channel Catfish 96 Hour Acute Toxicity
         LC50= .86; No Effect Level= .54 mg/L
      Daphnia magna 48 Hour Flow-Thru Bioassay
         LC50= .04; No Effect Level= .026 mg/L
      Daphnia magna 48 Hour Static Acute Bioassay
         LC50= .11; No Effect Level= .06 mg/L
      Daphnia pulex 48 Hour Static Renewal Bioassay
         LC50= .05; No Effect Level= .031 mg/L
      Fathead Minnow 7 Day Chronic Bioassay
         IC25 = .259  mg/L
      Fathead Minnow 96 Hour Flow-Thru Bioassay
         LC50= .72; No Effect Level= .41 mg/L
      Freshwater Snail(Physa sp.) 96 Hour Acute Toxicity
         LC50= .46; No Effect Level= .36 mg/L
      Menidia beryllina (Silversides) 96 Hour Flow-Thru Bioassay
         LC50= .62; No Effect Level= .35 mg/L
      Midge larvae (Chironomus tentans) 96 Hour Acute Toxicity
         LC50= .5; No Effect Level= .13 mg/L
      Mysid Shrimp 96 Hour Flow-Thru Bioassay
         LC50= .16; No Effect Level= .03 mg/L
      Rainbow Trout 96 Hour Flow-Thru Bioassay
         LC50= 2; No Effect Level= 1.2 mg/L
      Sheepshead Minnow 96 Hour Flow-Thru Bioassay
         LC50= 1.76; No Effect Level= 1 mg/L
No Data Available.
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BIODEGRADATION

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      BOD-28 (mg/g):  156
      BOD-5 (mg/g):  43
      COD (mg/g):  1470
      TOC (mg/g):  380
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13 Disposal considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is :
Exempt D001 per 40 CFR 261.21(a)(1).

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, Flammable
DOT: CORROSIVE LIQUIDS, FLAMMABLE, N.O.S.(QUATERNARY AMMONIUM COMPOUNDS, ETHYL ALCOHOL)
8(3), UN2920, PG II
DOT EMERGENCY RESPONSE GUIDE #: 132
Note: Some containers may be DOT exempt, please check BOL for exact container classification
IATA: CORROSIVE LIQUID, FLAMMABLE, N.O.S.(QUATERNARY AMMONIUM COMPOUNDS, ETHYL ALCOHOL)
8(3), UN 2920, PG II
IMDG: CORROSIVE LIQUID, FLAMMABLE, N.O.S.(QUATENARY AMMONIUM COMPOUNDS, ETHYL ALCOHOL)
8(3), UN 2920, PG II, MARINE POLLUTANT

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- 149
FOOD AND DRUG ADMINISTRATION:
21 CFR 176.300 (slimicides for wet end use)
When used in this specified application, all ingredients comprising this product are authorized by FDA for the manufacture of paper and paperboard that may contact aqueous and fatty foods as per 21 CFR 176.170(a)(4).
NSF Registered and/or meets USDA (according to 1998 Guidelines):
Registration number: Not Registered
G5, G7
SARA SECTION 312 HAZARD CLASS:
Immediate(acute);Delayed(Chronic);Fire
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):
This product contains one or more ingredients at trace levels known to the state of California to cause cancer and reproductive toxicity.

MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

16 Other information

HMIS vII		**CODE TRANSLATION**
Health	3	Serious Hazard
Fire	2	Moderate 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:	18-NOV-1997		** NEW **
	27-FEB-1998	15	18-NOV-1997
	15-MAY-1998	2	27-FEB-1998
	20-MAY-1998	11	15-MAY-1998
	17-AUG-1998	15	20-MAY-1998
	27-OCT-1998	;EDIT:9	17-AUG-1998
	12-NOV-1998	;EDIT:9	27-OCT-1998
	03-MAY-2000	12	12-NOV-1998
	05-JUL-2001	12	03-MAY-2000
	24-SEP-2001	3,4,5,7,8,14,16	05-JUL-2001
	16-NOV-2001	12	24-SEP-2001
	30-DEC-2005	13;EDIT:15	16-NOV-2001
	19-DEC-2006	13;EDIT:15	30-DEC-2005
	05-APR-2007	2	19-DEC-2006
	10-DEC-2007	5,7,8,10	05-APR-2007
	12-FEB-2009	12	10-DEC-2007
	24-FEB-2009	10	12-FEB-2009
	04-MAY-2009	8	24-FEB-2009
	09-JUL-2009	8	04-MAY-2009
	04-FEB-2011	7,15	09-JUL-2009
	25-MAY-2011	14	04-FEB-2011