



# Material Safety Data Sheet

Issue Date: 27-FEB-2012  
Supersedes: 07-APR-2008

CONTINUUM AEC3120

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## 1 Identification

**Identification of substance or preparation**  
CONTINUUM AEC3120

**Product Application Area**  
Water-based corrosion inhibitor/deposit 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: 27-FEB-2012

## 2 Hazard(s) identification

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**EMERGENCY OVERVIEW**

**DANGER**

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

DOT hazard: Corrosive to skin  
Odor: Slight; Appearance: Amber, 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.

**ACUTE EYE EFFECTS:**  
Corrosive to the eyes.

**ACUTE RESPIRATORY EFFECTS:**  
Mists/aerosols may cause irritation to upper respiratory tract.

**INGESTION EFFECTS:**

May cause slight gastrointestinal irritation.

**TARGET ORGANS:**

Prolonged or repeated exposures may cause primary irritant dermatitis and/or toxicity to the lung.

**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.

**HAZARDOUS INGREDIENTS:**

Cas#	Chemical Name	Range (w/w%)
64665-57-2	BENZOTRIAZOLE, METHYL, SODIUM SALT (SODIUM TOLYLTRIAZOLE), (TTA) Corrosive (eyes and skin); toxic (by ingestion)	3-7
1310-73-2	SODIUM HYDROXIDE Corrosive; toxic (by ingestion)	1-5
7631-95-0	SODIUM MOLYBDATE (MOLYBDIC ACID, DISODIUM SALT) Potential irritant (respiratory); potential lung toxicity	1-5

### 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:**

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:**

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:**

oxides of carbon, nitrogen, phosphorus and sulfur, hydrogen chloride

**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. 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:**

Alkaline. Do not mix with acidic material.

**STORAGE:**

Keep containers closed when not in use. Store in cool ventilated location. Store away from oxidizers.

## 8 Exposure controls / personal protection

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

BENZOTRIAZOLE, METHYL, SODIUM SALT (SODIUM TOLYLTRIAZOLE), (TTA)

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

SODIUM MOLYBDATE (MOLYBDIC ACID, DISODIUM SALT)

PEL (OSHA): 5 MG/M3 (AS Mo)

TLV (ACGIH): 0.5 MG/M3 (AS Mo) RESPIRABLE FRACTION

**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 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)	1.294	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	0	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-18		
Viscosity(cps 70F, 21C)	66	% Solubility (water)	100.0
Odor		Slight	
Appearance		Amber	
Physical State		Liquid	
Flash Point	P-M(CC)	> 200F	> 93C
pH As Is (approx.)		> 13.0	
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:**

**INCOMPATIBILITIES:**

May react with strong oxidizers.

**DECOMPOSITION PRODUCTS:**

oxides of carbon, nitrogen, phosphorus and sulfur, hydrogen chloride

## 11 Toxicological information

Oral LD50 RAT:	>5,000 mg/kg
NOTE - Estimated value	
Dermal LD50 RABBIT:	>5,000 mg/kg
NOTE - Estimated value	

## 12 Ecological information

**AQUATIC TOXICOLOGY**

Ceriodaphnia 7 Day Chronic Bioassay (pH adjusted)

Reproduction NOEL= 70; Reproduction LOEC= 142 mg/L

Daphnia magna 48 Hour Static Renewal Bioassay (pH adjusted)

LC50= 1415; No Effect Level= 1000 mg/L

Fathead Minnow 96 Hour Static Renewal Bioassay (pH adjusted)  
LC50= 785; No Effect Level= 500 mg/L  
Rainbow Trout 96 Hour Static Renewal Bioassay (pH adjusted)  
LC50= 450; No Effect Level= 125 mg/L

#### **BIODEGRADATION**

BOD-28 (mg/g): 20  
BOD-5 (mg/g): 8  
COD (mg/g): 298  
TOC (mg/g): 116

## **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**

Transportation Hazard: Corrosive to skin  
DOT: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.(SODIUM HYDROXIDE SOLUTION)  
8, UN3266, PG III, RQ  
DOT EMERGENCY RESPONSE GUIDE #: 154  
Note: Some containers may be DOT exempt, please check BOL for exact container classification  
IATA: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.(SODIUM HYDROXIDE SOLUTION)  
8, UN3266, PG III  
IMDG: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.(SODIUM HYDROXIDE SOLUTION)  
8, UN3266, PG III

## **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):**

3,860 gallons due to SODIUM HYDROXIDE;

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

Registration number: Not Registered

#### **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):**

This product contains one or more ingredients at trace levels known to the state of California to cause cancer.

**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	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:	30-JAN-1997		** NEW **
	01-APR-1999	12	30-JAN-1997
	26-MAY-1999	12	01-APR-1999
	03-JAN-2002	2,3,4,8	26-MAY-1999
	19-MAR-2002	12	03-JAN-2002
	24-MAR-2005	2	19-MAR-2002
	26-MAY-2006	8	24-MAR-2005
	04-APR-2008	2,4,5,8,10,15	26-MAY-2006
	07-APR-2008	3,5,14	04-APR-2008
	27-FEB-2012	2,4,5,8,14,16	07-APR-2008