



# Material Safety Data Sheet

Issue Date: 04-MAY-2011  
Supersedes: 18-JAN-2008

CONTINUUM AEC3107

---

## 1 Identification

**Identification of substance or preparation**  
CONTINUUM AEC3107

**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: 04-MAY-2011

## 2 Hazard(s) identification

\*\*\*\*\*  
**EMERGENCY OVERVIEW**

**CAUTION**

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

DOT hazard: Corrosive to aluminum  
Odor: Slight; Appearance: Yellow, 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

\*\*\*\*\*

**POTENTIAL HEALTH EFFECTS**

**ACUTE SKIN EFFECTS:**

Primary route of exposure; May cause slight irritation to the 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 with possible nausea, vomiting, abdominal discomfort and diarrhea.

**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%)
1310-73-2	SODIUM HYDROXIDE Corrosive; toxic (by ingestion)	1-5

**NON-HAZARDOUS INGREDIENTS:**

CAS#	CHEMICAL NAME
7732-18-5	WATER
3164-34-9	CALCIUM TARTRATE
868-18-8	SODIUM TARTRATE
109578-44-1	2,3-OXIRANEDICARBOXYLIC ACID, DISODIUM SALT, HOMOPOLYMER
7757-82-6	SODIUM SULFATE
78266-09-8	2-PROPENOIC ACID POLYMER WITH 2-HYDROXY-3-(2-PROPENYLOXY)-1-PROPANE SULFONIC ACID, SODIUM SALT

### 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:**

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 and sulfur

**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. Do not freeze. If frozen, thaw and mix completely prior to use. Store away from acids. Do not store in aluminum containers.

## 8 Exposure controls / personal protection

**EXPOSURE LIMITS**

**CHEMICAL NAME**

SODIUM HYDROXIDE

PEL (OSHA): 2 MG/M3

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

**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:**

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)	1.266	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	15	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-9		
Viscosity (cps 70F, 21C)	56	% Solubility (water)	100.0
Odor		Slight	
Appearance		Yellow	
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:**

Contact with strong acids may cause a violent reaction releasing heat. Contact with water reactive compounds may cause fire or explosion.

**INCOMPATIBILITIES:**

May react with acids or strong oxidizers.

**DECOMPOSITION PRODUCTS:**

oxides of carbon and sulfur

## 11 Toxicological information

Oral LD50 RAT: >5000 mg/kg  
NOTE - Calculated value according to GHS additivity formula

28 Day Oral RAT:  
NOTE - 100% polymer at 1,000 mg/kg/day caused no treatment related toxicity

Dermal LD50 RABBIT: >5000 mg/kg  
NOTE - Calculated value according to GHS additivity formula

Non-Ames Mutagenicity MOUSE:  
NOTE - 100% polymer was negative in the In Vivo Bone Marrow Micronucleus Assay

## 12 Ecological information

### AQUATIC TOXICOLOGY

Daphnia magna 48 Hour Static Renewal Bioassay (pH adjusted)  
LC50= 1575; No Effect Level= 1300 mg/L  
Fathead Minnow 96 Hour Static Bioassay with 48-Hour Renewal (pH adjusted)  
0% Mortality= 2000 mg/L  
Mysid Shrimp 48 Hour Static Renewal Bioassay (pH adjusted)  
10% Mortality= 8000; No Effect Level= 4000 mg/L  
Rainbow Trout 96 Hour Static Renewal Bioassay (pH adjusted)  
LC50= 2929; No Effect Level= 2000 mg/L  
Sheepshead Minnow 96 Hour Static Renewal Bioassay (pH adjusted)  
No Effect Level= 8000 mg/L

### BIODEGRADATION

BOD-28 (mg/g): 24  
BOD-5 (mg/g): 10  
COD (mg/g): 286  
TOC (mg/g): 121

## 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 aluminum  
DOT: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.(SODIUM HYDROXIDE SOLUTION)  
8, UN 3266, 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, UN 3266, PG III  
IMDG: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.(SODIUM HYDROXIDE SOLUTION)  
8, UN 3266, 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):

5,268 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)

**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	1	Slight Hazard
Fire	1	Slight Hazard
Reactivity	0	Minimal Hazard
Special	ALK	pH above 12.0
(1) Protective Equipment	B	Goggles, Gloves

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

**CHANGE LOG**

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
	-----	-----	-----
MSDS status:	17-JUN-1997		** NEW **
	03-OCT-1997	;EDIT:9	17-JUN-1997
	11-JUN-1998	12	03-OCT-1997
	02-SEP-1998	12	11-JUN-1998
	05-JAN-1999	12	02-SEP-1998
	14-JAN-2003	2,3,4,15	05-JAN-1999
	26-MAY-2006	8	14-JAN-2003
	18-JAN-2008	4,5,8,10,15	26-MAY-2006
	04-MAY-2011	7,10,15	18-JAN-2008