



Material Safety Data Sheet

Issue Date: 30-DEC-2008
Supersedes: 29-DEC-2008

INHIBITOR AZ8103

1 Identification

Identification of substance or preparation
INHIBITOR AZ8103

Product Application Area
Water-based corrosion inhibitor.

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

Prepared by Product Stewardship Group: T 215-355-3300 Prepared on: 30-DEC-2008

2 Hazard(s) identification

EMERGENCY OVERVIEW

DANGER

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

DOT hazard: Corrosive to skin
Odor: Mild; Appearance: Dark Brown, 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; Corrosive to skin. Skin sensitizer.

ACUTE EYE EFFECTS:

Corrosive to the eyes.

ACUTE RESPIRATORY EFFECTS:

Mists/aerosols cause irritation to the upper respiratory tract.

INGESTION EFFECTS:

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 tissue necrosis, primary irritant dermatitis, and/or skin sensitization.

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

Causes severe irritation, burns or tissue ulceration with subsequent scarring.

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 (CAUSTIC SODA) Corrosive; toxic (by ingestion)	10-20
118685-34-0	BUTYL BENZOTRIAZOLE, SODIUM SALT Corrosive (eyes and skin); sensitizer (skin)	10-20

NON-HAZARDOUS INGREDIENTS:

CAS#	CHEMICAL NAME
7732-18-5	WATER

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. Get medical attention if irritation persists.

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:

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, foam or water

HAZARDOUS DECOMPOSITION PRODUCTS:

oxides of carbon

FLASH POINT:

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

MISCELLANEOUS:

Corrosive to skin
UN 1824;Emergency Response Guide #154

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. Corrosive(Skin/eyes). 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.

8 Exposure controls / personal protection

EXPOSURE LIMITS**CHEMICAL NAME**

SODIUM HYDROXIDE (CAUSTIC SODA)
PEL (OSHA): 2 MG/M3 (CEILING)
TLV (ACGIH): 2 MG/M3 (CEILING)

BUTYL BENZOTRIAZOLE, SODIUM SALT
PEL (OSHA): NOT DETERMINED
TLV (ACGIH): NOT DETERMINED

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 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

Specific Grav.(70F,21C)	1.184	Vapor Pressure (mmHG)	~ 22.0
Freeze Point (F)	-4	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-20		
Viscosity(cps 70F,21C)	37	% Solubility (water)	100.0

Odor	Mild
Appearance	Dark Brown
Physical State	Liquid
Flash Point	P-M(CC) > 200F > 93C
pH As Is (approx.)	13.5
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:

INCOMPATIBILITIES:

May react with acids.

DECOMPOSITION PRODUCTS:

oxides of carbon

11 Toxicological information

Oral LD50 RAT:	945 mg/kg
NOTE - Estimated value	
Dermal LD50 RABBIT:	>5,000 mg/kg
NOTE - Estimated value	

12 Ecological information

AQUATIC TOXICOLOGY

Daphnia magna 48 Hour Static Acute Bioassay (pH adjusted)
LC50= 66; No Effect Level= 28 mg/L
Fathead Minnow 96 Hour Static Acute Bioassay (pH adjusted)
LC50= 39.4; No Effect Level= 28 mg/L
Menidia beryllina (Silversides) 96 Hour Static Acute Bioassay
LC50= 20.5; 5% Mortality= 6.25 mg/L
Mysid Shrimp 96 Hour Static Acute Bioassay
LC50= 17.2; No Effect Level= 6.25 mg/L
Rainbow Trout 96 Hour Static Acute Bioassay
LC50= 28.1; No Effect Level= 21 mg/L

BIODEGRADATION

BOD-28 (mg/g): 7
BOD-5 (mg/g): 7
COD (mg/g): 271
TOC (mg/g): 67

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

DOT HAZARD: Corrosive to skin
PROPER SHIPPING NAME: SODIUM HYDROXIDE SOLUTION
8, UN 1824, PG II, RQ
DOT EMERGENCY RESPONSE GUIDE #: 154
Note: Some containers may be DOT exempt, please check BOL for exact container classification

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):

741 gallons due to SODIUM HYDROXIDE (CAUSTIC SODA);

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) :

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	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:	13-FEB-1998		** NEW **
	22-AUG-2001	15	13-FEB-1998
	08-JUN-2005	4	22-AUG-2001
	26-MAY-2006	8	08-JUN-2005
	19-DEC-2008	4,8	26-MAY-2006
	22-DEC-2008	4,8	19-DEC-2008
	23-DEC-2008	4,8	22-DEC-2008
	24-DEC-2008	4,8	23-DEC-2008
	25-DEC-2008	4,8	24-DEC-2008
	26-DEC-2008	4,8	25-DEC-2008
	29-DEC-2008	4,8	26-DEC-2008
	30-DEC-2008	4,8	29-DEC-2008