

GE Water & Process Technologies

Material Safety Data Sheet

INHIBITOR AZ8101

Issue Date: 18-SEP-2013 Supercedes: 21-SEP-2011

1 Identification

Identification of substance or preparation INHIBITOR AZ8101

Product Application Area

Water-based corrosion inhibitor.

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: 18-SEP-2013

2 Hazard(s) identification

EMERGENCY OVERVIEW

WARNING

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, RQ Odor: Mild; Appearance: Light Amber, Liquid

Fire fighters should wear positive pressure self-contained breathing apparatus(full face-piece type). Proper fire-extinguishing media: dry chemical/CO2/foam or water--slippery condition; use sand/grit.

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 slight gastrointestinal irritation.

TARGET ORGANS:

Prolonged or repeated exposures may cause primary irritant dermatitis.

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%)
64665-57-2	BENZOTRIAZOLE, METHYL, SODIUM SALT (SODIUM TOLYLTRIAZOLE), (TTA) Corrosive (skin)	15-40
1310-73-2	SODIUM HYDROXIDE Corrosive	1-5

NON-HAZARDOUS INGREDIENTS:

CAS# CHEMICAL NAME

7732-18-5 WATER

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/CO2/foam or water--slippery condition; use sand/grit.

HAZARDOUS DECOMPOSITION PRODUCTS:

oxides of carbon and nitrogen

FLASH POINT:

> 200F > 93C SETA(CC)

MISCELLANEOUS:

Corrosive to aluminum, RQ UN3266; 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. Do not mix with acidic material.

STORAGE:

Keep containers closed when not in use. If frozen, thaw completely and mix thoroughly prior to use. Do not store in aluminum containers.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

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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
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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) 1.077 Vapor Pressure (mmHG) ~ 18.0 Freeze Point (F) 13 Vapor Density (air=1) < 1.00 Freeze Point (C) -11 Viscosity (cps 70F, 21C) 6 % Solubility (water) 100.0 Odor Mild Appearance Light Amber Physical State Flash Point SETA(CC) > 200F > 93C

pH As Is (approx.) 12.8
Evaporation Rate (Water=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 water reactive compounds may cause fire or explosion. Contact with strong acids may cause a violent reaction releasing heat.

INCOMPATIBILITIES:

May react with acids or strong oxidizers.

DECOMPOSITION PRODUCTS:

oxides of carbon and nitrogen

11 Toxicological information

Oral LD50 RAT: 2760 mg/kg

NOTE - Calculated according to GHS additivity formula

Dermal LD50 RABBIT: >5000 mg/kg

NOTE - Calculated according to GHS additivity formula

12 Ecological information

AQUATIC TOXICOLOGY

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Daphnia magna 48 Hour Static Screen

0% Mortality= 500 mg/L

Fathead Minnow 96 Hour Acute Toxicity (Estimated)

LC50= 520; No Effect Level= 380 mg/L

Rainbow Trout 96 Hour Static Acute Bioassay

LC50= 88.1; No Effect Level= 42 mg/L
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BIODEGRADATION

BOD-28 (mg/g): 9 BOD-5 (mg/g): 0 COD (mg/g): 293 TOC (mg/g): 94

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

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Transportation Hazard: Corrosive to aluminum, RQ
DOT: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.(SODIUM HYDROXIDE;
BENZOTRIAZOLE, METHYL, SODIUM SALT)
8, UN3266, PG III

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;
BENZOTRIAZOLE, METHYL, SODIUM SALT)
8, UN3266, PG III

IMDG: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.No translation
(SODIUM HYDROXIDE; BENZOTRIAZOLE, METHYL, SODIUM SALT) maintained
8, UN3266, PG III
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15 Regulatory information

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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):

No regulated constituent present at OSHA thresholds

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)

SARA SECTION 302 CHEMICALS:

No regulated constituent present at OSHA thresholds

SARA SECTION 313 CHEMICALS:
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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	1	Slight Hazard	
Fire	0	Minimal Hazard	
Reactivity	0	Minimal Hazard	
Special	ALK	pH above 12.0	
(1) Protective Equipment	В	Goggles, Gloves	

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

CHANGE LOG

		EFFECTIVE		
		DATE	REVISIONS TO SECTION:	SUPERCEDES
MSDS	status:	23-JUN-1997		** NEW **
		21-JAN-2002	15	23-JUN-1997
		26-MAY-2006	8	21-JAN-2002
		13-JUL-2007	2,3,4,5,8,9,10,16	26-MAY-2006
		02-JUL-2010	7,8,10,14	13-JUL-2007
		21-SEP-2011	7,8,10,14	02-JUL-2010
		18-SEP-2013	14	21-SEP-2011