

GE Water & Process Technologies

Material Safety Data Sheet

Supercedes: 27-MAY-2011

Issue Date: 15-JUN-2011

GENGARD GN8240

1 Identification

Identification of substance or preparation GENGARD GN8240

Product Application Area

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: 15-JUN-2011

2 Hazard(s) identification

EMERGENCY OVERVIEW

WARNING

May cause moderate irritation to the skin. Severe irritant to the eyes. Mists/aerosols cause irritation to the upper respiratory tract.

DOT hazard: Environmentally hazardous substance: RQ Odor: Slight.Pleasant; 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

POTENTIAL HEALTH EFFECTS

ACUTE SKIN EFFECTS:

Primary route of exposure; May cause moderate irritation to the skin.

ACUTE EYE EFFECTS:

Severe irritant to the eyes.

ACUTE RESPIRATORY EFFECTS:

Primary route of exposure; Mists/aerosols cause irritation to the

upper respiratory tract.

INGESTION EFFECTS:

May cause gastrointestinal irritation with possible nausea, vomiting, headache, dizziness, unconsciousness and injury to the kidneys and liver.

TARGET ORGANS:

Product or product component may cause reproductive toxicity at maternal toxic levels (based on animal testing).

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

Inhalation may cause irritation of the respiratory tract. Skin contact may cause itching and/or redness.

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%)

TRADE SECRET INGREDIENT (E069); TSRN 125438 - 5052P *

Irritant (eyes)

7733-02-0 ZINC SULFATE 3-7

Severe irritant; potential reproductive toxin

NON-HAZARDOUS INGREDIENTS:

CAS# CHEMICAL NAME

7732-18-5 WATER

903573-39-7 ACRYLATE TERPOLYMER

4 First-aid measures

SKIN CONTACT:

Wash thoroughly with soap and water. Remove contaminated clothing. Thoroughly wash clothing before reuse. 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, nitrogen, phosphorus and sulfur

FLASH POINT:

> 213F > 101C P-M(CC)

MISCELLANEOUS:

Environmentally hazardous substance: RQ NA 3082; Emergency Response Guide #171

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:

Normal chemical handling.

STORAGE:

Keep containers closed when not in use. Protect from freezing. If frozen, thaw completely and mix thoroughly prior to use. Store only in vented containers.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

```
TRADE SECRET INGREDIENT(E069); TSRN 125438 - 5052P

PEL (OSHA): LIMITS HAVE NOT BEEN ESTABLISHED BY US OSHA.

TLV (ACGIH): LIMITS HAVE NOT BEEN ESTABLISHED BY ACGIH.

ZINC SULFATE

PEL (OSHA): LIMITS HAVE NOT BEEN ESTABLISHED BY US OSHA.

TLV (ACGIH): LIMITS HAVE NOT BEEN ESTABLISHED BY ACGIH.
```

ENGINEERING CONTROLS:

adequate ventilation

PERSONAL PROTECTIVE EQUIPMENT:

Use protective equipment in accordance with 29 CFR 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) 1.123 Vapor Pressure (mmHG) \sim 18.0 Freeze Point (F) 30 Vapor Density (air=1) < 1.00 Freeze Point (C) -1

Viscosity(cps 70F,21C) 14 % Solubility (water) 100.0

Odor Slight.Pleasant

Appearance Amber Physical State Liquid

Flash Point P-M(CC) > 213F > 101C

pH As Is (approx.) 2.4
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 bases may cause a violent reaction releasing heat. Contact with water reactive compounds may cause fire or explosion.

INCOMPATIBILITIES:

May react with bases or strong oxidizers.

DECOMPOSITION PRODUCTS:

oxides of carbon, nitrogen, phosphorus and sulfur

11 Toxicological information

Oral LD50 RAT: >5000 mg/kg

NOTE - Calculated value according to GHS additivity formula

Dermal LD50 RABBIT: >5000 mg/kg

NOTE - Calculated value according to GHS additivity formula

12 Ecological information

AQUATIC TOXICOLOGY

```
Daphnia magna 48 Hour Acute Toxicity (Estimated) LC50= 65; No Effect Level= 6 mg/L Fathead Minnow 96 Hour Acute Toxicity (Estimated) LC50= 60; No Effect Level= 24 mg/L
```

BIODEGRADATION

BOD-28 (mg/g): 34 BOD-5 (mg/g): 15 COD (mg/g): 201 TOC (mg/g): 62

13 Disposal considerations

If this undiluted product is discarded as a waste, the US RCRA hazardous waste identification number is : Not applicable.

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: Environmentally hazardous substance: RQ
DOT: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.(ZINC SULFATE)
9, NA 3082, PG III, RQ
DOT EMERGENCY RESPONSE GUIDE #: 171
Note: Some containers may be DOT exempt, please check BOL for exact container classification
IATA: Not Regulated

IMDG: Not Regulated
```

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):
      2,284 gallons due to ZINC SULFATE;
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:
   CAS#
                        CHEMICAL NAME
                                                              RANGE
   7733-02-0
                          ZINC SULFATE
                                                              2.0-5.0%
```

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

CAS# CHEMICAL NAME 7733-02-0 ZINC SULFATE

16 Other information

HMIS vII CODE TRANSLATION

Health	2	Moderate Hazard
Fire	0	Minimal Hazard
Reactivity	0	Minimal Hazard
Special	NONE	No special Hazard
(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:	26-FEB-2010		** NEW **
	01-FEB-2011	8	26-FEB-2010
	25-MAR-2011	5	01-FEB-2011
	05-APR-2011	11	25-MAR-2011
	06-APR-2011	2,9,10	05-APR-2011
	27-MAY-2011	3,8	06-APR-2011
	15-JUN-2011	10,12	27-MAY-2011