



# Material Safety Data Sheet

Issue Date: 10-FEB-2012  
Supersedes: 17-JUN-2011

GENGARD GN8144

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## 1 Identification

### Identification of substance or preparation

GENGARD GN8144

### 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: 10-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 Ammonia; 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

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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 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 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. 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)	3-7
202420-04-0	CHLOROTOLYLTRIAZOLE SODIUM SALT Potential irritant	1-5

**NON-HAZARDOUS INGREDIENTS:**

CAS#	CHEMICAL NAME
7732-18-5	WATER
903573-39-7	ACRYLATE TERPOLYMER TRADE SECRET (N408) TSRN: 125438 - 11753
7647-14-5	SODIUM CHLORIDE

### 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 water for 30 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.

Rinse mouth with plenty of water. Dilute contents of stomach using 4-10 fluid ounces (120-300 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 and nitrogen, hydrogen chloride

**FLASH POINT:**

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

**MISCELLANEOUS:**

Corrosive to skin

UN 3267;Emergency Response Guide #153

## 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(Eyes). Do not mix with acidic material. Take precautions to minimize foaming.

**STORAGE:**

Store below 100F ( 38C). Keep containers closed when not in use. Protect from freezing. If frozen, thaw completely and mix thoroughly 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

CHLOROTOLYLTRIAZOLE SODIUM SALT

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

**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)	1.184	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	18	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-8		
Viscosity(cps 70F,21C)	45	% Solubility (water)	100.0

Odor	Slight Ammonia
Appearance	Dark Brown
Physical State	Liquid
Flash Point	P-M(CC) > 213F > 101C
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 nitrogen, hydrogen chloride

## 11 Toxicological information

Oral LD50 RAT: 4000 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 Static Acute Bioassay (Estimated/pH adjusted)

LC50= 720; No Effect Level= 487 mg/L

Fathead Minnow 96 Hour Static Acute Bioassay (Estimated/pH adjusted)

LC50= 185; No Effect Level= 88 mg/L

### BIODEGRADATION

BOD-28 (mg/g): 29

BOD-5 (mg/g): 13

COD (mg/g): 270

TOC (mg/g): 83

## 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, ORGANIC, N.O.S. (ACRYLATE TERPOLYMER, SODIUM HYDROXIDE)

8, UN3267, PG III, RQ

DOT EMERGENCY RESPONSE GUIDE #: 153

Note: Some containers may be DOT exempt, please check BOL for exact container classification

IATA: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (ACRYLATE TERPOLYMER, SODIUM HYDROXIDE)

8, UN3267, PG III

IMDG: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S. (ACRYLATE TERPOLYMER, SODIUM HYDROXIDE)

8, UN3267, 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) :**

2,874 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:	02-SEP-2010		** NEW **
	01-FEB-2011	8	02-SEP-2010
	05-APR-2011	11	01-FEB-2011
	17-JUN-2011	3, 7, 8, 10	05-APR-2011
	10-FEB-2012	2, 4, 5, 8, 14, 16	17-JUN-2011