

GE Water & Process Technologies

Issue Date: 02-OCT-2008

Supercedes: 17-APR-2006

Material Safety Data Sheet

DIANODIC DN2300

1 Identification

Identification of substance or preparation DIANODIC DN2300

Product Application Area

Water-based 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: 02-OCT-2008

2 Hazard(s) identification

EMERGENCY OVERVIEW

CAUTION

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

DOT hazard is not applicable 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 slight 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:

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:

This product is not hazardous as defined by OSHA regulations.

No component is considered to be a carcinogen by the National Toxicology Program, the International Agency for Research on Cancer, or the Occupational Safety and Health Administration at Pennsylvania thresholds for carcinogens.

~!!E\!# ~ ? ! !!? \!E

NON-HAZARDOUS INGREDIENTS:

CAS#	CHEMICAL NAME
7732-18-5	WATER
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 medical attention if irritation persists after flushing.

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:

> 210F > 99C 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:

Normal chemical handling.

STORAGE:

Keep containers closed when not in use. Protect from freezing. If frozen, thaw and mix completely prior to use. Shelf life 360 days.

8 Exposure controls / personal protection

EXPOSURE LIMITS

This product is not hazardous as defined by OSHA regulations.

ENGINEERING CONTROLS:

adequate ventilation

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

Specific Grav.(70F,21C) 1.169 Freeze Point (F) 25	<pre>Vapor Pressure (mmHG) Vapor Density (air=1)</pre>	~ 18.0 < 1.00
Freeze Point (C) -4 Viscosity(cps 70F,21C) 42	% Solubility (water)	100.0
Odor Appearance Physical State Flash Point P-M(CC) pH As Is (approx.) Evaporation Rate (Ether=1) Percent VOC:	Slight Yellow Liquid > 210F > 98C 5.2 < 1.00 0.0	

NA = not applicable ND = not determined

10 Stability and reactivity

STABILITY:

Stable under normal storage conditions.

HAZARDOUS POLYMERIZATION:

Will not occur.

INCOMPATIBILITIES:

May react with strong oxidizers.

DECOMPOSITION PRODUCTS:

oxides of carbon and sulfur

11 Toxicological information

```
Oral LD50 RAT: >5,000 mg/kg
Dermal LD50 RABBIT: >2,000 mg/kg
Inhalation LC50 RAT: >5 mg/L/4hr
Skin Irritation Score RABBIT: 1
Eye Irritation Score RABBIT: 1.67
```

12 Ecological information

AQUATIC TOXICOLOGY

```
Daphnia magna 48 Hour Static Renewal Bioassay (pH adjusted)
LC50= 1767; No Effect Level= 1250 mg/L
Fathead Minnow 96 Hour Static Renewal Bioassay (pH adjusted)
LC50= 1960; No Effect Level= 313 mg/L
Mysid Shrimp 48 Hour Static Renewal Bioassay (pH adjusted)
10% Mortality= 16000; 0% Mortality= 8000 mg/L
Sheepshead Minnow 96 Hour Static Renewal Bioassay (pH adjusted)
0% Mortality= 16000 mg/L
```

BIODEGRADATION

BOD-28 (mg/g): 32 BOD-5 (mg/g): 10 COD (mg/g): 368 TOC (mg/g): 144

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

```
DOT HAZARD:

PROPER SHIPPING NAME:

DOT EMERGENCY RESPONSE GUIDE #: Not applicable

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):

No regulated constituent present at OSHA thresholds

FOOD AND DRUG ADMINISTRATION:

FDA APPROVED FOR MILL SUPPLY WATER

NSF Registered and/or meets USDA (according to 1998 Guidelines):

Registration number: Not Registered G5, G7

SARA SECTION 312 HAZARD CLASS:

Product is non-hazardous under Section 311/312

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	1	Slight Hazard
Fire	1	Slight 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:	25-SEP-1997		** NEW **
	10-NOV-1997	15	25-SEP-1997
	06-FEB-1998	12	10-NOV-1997
	30-OCT-2001	2,4	06-FEB-1998
	17-APR-2006	7,8	30-OCT-2001
	02-OCT-2008	3,4,5,8,10	17-APR-2006