

GE Water & Process Technologies

Material Safety Data Sheet

NOVUS CE2680

Issue Date: 16-MAY-2011 Supercedes: 02-JUL-2010

1 Identification

Identification of substance or preparation NOVUS CE2680

Product Application Area

Retention/drainage/clarification aid.

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: 16-MAY-2011

2 Hazard(s) identification

EMERGENCY OVERVIEW

CAUTION

May cause moderate irritation to the skin. May cause dermatitis. May cause moderate irritation to the eyes. Vapors, gases, mists or aerosols may cause irritation to the upper respiratory tract. Prolonged exposure may cause dizziness and headache.

DOT hazard: Environmentally hazardous substance: Marine Pollutant Odor: Slight Hydrocarbon; Appearance: White To Off-White, Emulsion

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. May cause dermatitis.

ACUTE EYE EFFECTS:

May cause moderate irritation to the eyes.

ACUTE RESPIRATORY EFFECTS:

Primary route of exposure; Vapors, gases, mists or aerosols may cause irritation to the upper respiratory tract. Prolonged exposure may cause dizziness and headache.

INGESTION EFFECTS:

May cause gastrointestinal irritation with possible nausea, vomiting, diarrhea, mental confusion, dizziness and lethargy. Small amounts aspirated during ingestion or vomiting may cause lung injury, possibly leading to death.

TARGET ORGANS:

Prolonged or repeated exposures may cause CNS depression and/or defatting-type dermatitis.

MEDICAL CONDITIONS AGGRAVATED:

Not known.

SYMPTOMS OF EXPOSURE:

Excessive dermal exposure causes defatting and drying of skin. Excessive inhalation of vapors causes dizziness, headache and nausea. $\,$

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.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name Rang	ge(w/w%)
64742-47-8	ISOPARAFFINIC PETROLEUM DISTILLATE Combustible liquid; irritant; CNS depressant; IARC=3 (carcinogen status not classifiable)	15-40
24938-91-8	POLY(OXY-1,2-ETHANEDIYL), ALPHA-TRIDECYL-OMEGA-HYDROXY- Severe eye irritant; respiratory irritant; slight skin irritant	1-5

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:

This product contains a hydrocarbon solvent. Aspiration into the lungs will result in chemical pneumonia and may be fatal.

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)

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:

Clean spill immediately. Wash contaminated skin promptly.

STORAGE:

Keep containers closed when not in use. Protect from freezing. Product forms an unusable solid that can not be thawed, even at room temperature, if subjected to freezing conditions.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

```
ISOPARAFFINIC PETROLEUM DISTILLATE
PEL (OSHA): LIMITS HAVE NOT BEEN ESTABLISHED BY US OSHA.
TLV (ACGIH): TWA (Skin): 200 MG/M3; A3 (for Kerosene)

POLY(OXY-1,2-ETHANEDIYL), ALPHA-TRIDECYL-OMEGA-HYDROXY-
PEL (OSHA): LIMITS HAVE NOT BEEN ESTABLISHED BY US OSHA.
TLV (ACGIH): LIMITS HAVE NOT BEEN ESTABLISHED BY ACGIH.
MISC: toxic to aquatic organisms;
```

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 a respirator with organic vapor cartridges and dust/mist prefilters.

SKIN PROTECTION:

viton gloves-- Wash off after each use. Replace as necessary.

EYE PROTECTION:

splash proof chemical goggles

9 Physical and chemical properties

Spec. Grav.(70F,21C) 1.034 Vapor Pressure (mmHG) \sim 18.0 Freeze Point (F) < 23 Vapor Density (air=1) > 1.00 Freeze Point (C) < -5 Viscosity(cps 70F,21C) 1300 % Solubility (water) ND

Odor
Appearance
Appearance
Physical State
Flash Point
P-M(CC)
PH 1% Sol. (approx.)
Evaporation Rate (Ether=1)
Percent VOC:
Slight Hydrocarbon
White To Off-White
Emulsion
> 200F > 93C
4.8

2.1.00

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.

INCOMPATIBILITIES:

May react with strong oxidizers.

DECOMPOSITION PRODUCTS:

oxides of carbon

11 Toxicological information

Oral LD50 RAT: 860 mg/kg

NOTE - Calculated value according to GHS additivity formula

Dermal LD50 RABBIT: 1420 mg/kg

NOTE - Calculated value according to GHS additivity formula

12 Ecological information

AQUATIC TOXICOLOGY

Ceriodaphnia 48 Hour Static Renewal Bioassay LC50= .09; No Effect Level= .06 mg/L Daphnia magna 48 Hour Static Renewal Bioassay LC50= 2.4; No Effect Level= .39 mg/L Fathead Minnow 96 Hour Static Renewal Bioassay LC50= 5.1; No Effect Level= .8 mg/L

BIODEGRADATION

BOD-28 (mg/g): 132 BOD-5 (mg/g): 122 COD (mg/g): 850 TOC (mg/g): 320

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: Marine
Pollutant

DOT: Not Regulated

DOT EMERGENCY RESPONSE GUIDE #: Not applicable
Note: Some containers may be DOT exempt, please check BOL for
exact container classification

IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, N.O.S.(QUATERNARY
AMMONIUM POLYACRYLAMIDE)
9, UN 3082 PG III, MARINE POLLUTANT

IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE LIQUID, N.O.S.(QUATERNARY
AMMONIUM POLYACRYLAMIDE)
9, UN 3082 PG III, MARINE POLLUTANT

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):

Treat as oil spill

FOOD AND DRUG ADMINISTRATION:

Generally recognized as safe (GRAS) for papermaking applications that may contact aqueous and fatty food per 21 CFR 170.30.

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 known to the state of California to cause cancer and reproductive toxicity.

MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

16 Other information

HMIS VII CODE TRANSLATION

Health	2	Moderate 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:	29-JAN-1997		** NEW **
	28-OCT-1998	2,8	29-JAN-1997
	01-JUN-1999	15	28-OCT-1998
	19-MAY-2000	3,4	01-JUN-1999
	13-AUG-2001	4	19-MAY-2000
	01-APR-2004	15	13-AUG-2001
	02-AUG-2004	2	01-APR-2004
	01-FEB-2006	8,15	02-AUG-2004
	02-JUL-2010	10	01-FEB-2006
	16-MAY-2011	14	02-JUL-2010