



Material Safety Data Sheet

Issue Date: 13-OCT-2008
Supersedes: 28-OCT-2005

KLARAID PC310

1 Identification

Identification of substance or preparation

KLARAID PC310

Product Application Area

Polyamine.

Company/Undertaking Identification

GE Betz, Inc.
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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: 13-OCT-2008

2 Hazard(s) identification

EMERGENCY OVERVIEW

CAUTION

May cause slight irritation to the skin. May cause moderate irritation to the eyes. Vapors, gases, mists and/or aerosols may cause irritation to upper respiratory tract.

DOT hazard is not applicable
Odor: Amine; Appearance: Colorless To Yellow, 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:

Vapors, gases, mists and/or 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.

HAZARDOUS INGREDIENTS:

Cas#	Chemical Name	Range (w/w%)
25988-97-0	METHANAMINE, N-METHYL-, POLYMER WITH (CHLOROMETHYL) OXIRANE Irritant (eyes)	30-60

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, hydrogen chloride

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:

Normal chemical handling.

STORAGE:

Keep containers closed when not in use. Store in cool ventilated location. Store away from oxidizers.

8 Exposure controls / personal protection

EXPOSURE LIMITS**CHEMICAL NAME**

METHANAMINE, N-METHYL-, POLYMER WITH (CHLOROMETHYL) OXIRANE

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

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)	1.114	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	10	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-12		
Viscosity(cps 70F,21C)	66	% Solubility (water)	100.0

Odor	Amine
Appearance	Colorless To Yellow
Physical State	Liquid
Flash Point	P-M(CC) > 200F > 93C
pH As Is (approx.)	7.1
Evaporation Rate (Butyl Acetate=1)	< 1.00
Percent VOC:	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 nitrogen, hydrogen chloride

11 Toxicological information

Oral LD50 RAT:	1,200 mg/kg
Dermal LD50 RABBIT:	>2,000 mg/kg
NOTE - Estimated value	
Skin Irritation Score RABBIT:	0.08
Eye Irritation Score RABBIT:	28.66
NOTE - Max. score at 1 Hr; completely reversible by day 2	
90 Day Feed Study RAT:	NEGATIVE
NOTE - No adverse effects were observed given 2,000 ppm daily in the feed.	
90 Day Feed Study DOG:	NEGATIVE
NOTE - No adverse effects were observed given 2,000 ppm daily in the feed.	

12 Ecological information

AQUATIC TOXICOLOGY

Bluegill Sunfish 96 Hour Static Acute Bioassay
LC50= .69; No Effect Level= .48 mg/L
Daphnia magna 48 Hour Static Renewal Bioassay

LC50= .165; No Effect Level= .12 mg/L
Fathead Minnow 96 Hour Static Renewal Bioassay
LC50= .38; 5% Mortality= .12 mg/L
Rainbow Trout 96 Hour Static Screen
100% Mortality= 1.5; 0% Mortality= .15 mg/L

BIODEGRADATION

BOD-28 (mg/g): 9
BOD-5 (mg/g): 5
COD (mg/g): 347
TOC (mg/g): 153

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: Not Applicable
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:

21 CFR 176.170 (components of paper and paperboard in contact with aqueous and fatty foods)

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

Registration number: Not Registered

G1, L1

SARA SECTION 312 HAZARD CLASS:

Immediate(acute)

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	B	Goggles,Gloves

(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:	12-FEB-1997		** NEW **
	11-JUL-1997	15	12-FEB-1997
	22-JUL-1997	12	11-JUL-1997
	09-OCT-1997	11	22-JUL-1997
	20-JAN-1999	15	09-OCT-1997
	26-MAY-1999	12	20-JAN-1999
	21-JUL-1999	4	26-MAY-1999
	26-APR-2001	4	21-JUL-1999
	20-JUL-2001	8	26-APR-2001
	28-OCT-2005	2,8	20-JUL-2001
	13-OCT-2008	4,5,8,10	28-OCT-2005