GE
Water & Process Technologies

Material Safety Data Sheet

Issue Date: 09-JUN-2011
Supercedes: 05-JAN-2010

KLARAID IC1172

1 Identification

Identification of substance or preparation
KLARAID IC1172

Product Application Area
Waste treatment additive.

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: 09-JUN-2011

2 Hazard(s) identification

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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 is not applicable
Odor: Mild; Appearance: Colorless To Light 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
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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:
Mists/aerosols cause irritation to the upper respiratory tract.

INGESTION EFFECTS:
May cause gastrointestinal irritation.

TARGET ORGANS:
Repeated skin contact may cause sensitization.

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%)
12042-91-0	ALUMINUM CHLORHYDROXIDE	30-60

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:
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. Do not freeze. If frozen, thaw and mix completely prior to use.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

ALUMINUM CHLORHYDROXIDE
PEL (OSHA): LIMITS HAVE NOT BEEN ESTABLISHED BY US OSHA.
TLV (ACGIH): TWA = 1 MG/M3; A4 (Aluminum metal and insoluble compounds, respirable fraction)

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:
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)	1.339	Vapor Pressure (mmHG)	~ 18.0
Freeze Point (F)	19	Vapor Density (air=1)	< 1.00
Freeze Point (C)	-7		
Viscosity(cps 70F,21C)	45	% Solubility (water)	100.0

Odor		Mild
Appearance		Colorless To Light Yellow
Physical State		Liquid
Flash Point	P-M(CC)	> 200F > 93C
pH As Is (approx.)		3.7
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 water reactive compounds may cause fire or explosion.

INCOMPATIBILITIES:

May react with strong oxidizers.

DECOMPOSITION PRODUCTS:

hydrogen chloride

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

Ceriodaphnia 48 Hour Static Renewal Bioassay (pH adjusted)

LC50= 750; No Effect Level= 156 mg/L

Ceriodaphnia 7 Day Chronic Bioassay

Reproduction NOEL= 1.5; Reproduction LOEC= 3.1 mg/L

Daphnia magna 48 Hour Static Screen (pH adjusted)

20% Mortality= 5000; 0% Mortality= 2500 mg/L

Fathead Minnow 7 Day Chronic Bioassay

Growth NOEL= 5; Growth LOEL= 10 mg/L

Fathead Minnow 96 Hour Static Acute Bioassay

LC50= 517; No Effect Level= 370 mg/L

Rainbow Trout 96 Hour Static Acute Bioassay

LC50= 390; No Effect Level= 210 mg/L

BIODEGRADATION
No Data Available.

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: Not Applicable
DOT: Not Regulated

DOT EMERGENCY RESPONSE GUIDE #: Not applicable
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):
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
This product contains ingredients that have been determined as safe for use in sewage and/or drain lines. (L1)
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):
No regulated constituents present

MICHIGAN REGULATORY INFORMATION

No regulated constituent present at OSHA thresholds

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	B	Goggles,Gloves

(1) refer to section 8 of MSDS for additional protective equipment recommendations.

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
MSDS status:	30-JAN-1997		** NEW **
	20-FEB-1997	12	30-JAN-1997
	01-MAY-1997	8	20-FEB-1997
	22-OCT-1997	15	01-MAY-1997
	18-JAN-1999	15	22-OCT-1997
	04-APR-2000	12	18-JAN-1999
	30-AUG-2000	4	04-APR-2000
	01-JUN-2001	15	30-AUG-2000
	12-NOV-2002	3	01-JUN-2001
	07-JUN-2005	12	12-NOV-2002
	07-JUN-2006	8	07-JUN-2005
	19-JUN-2009	5,8,10	07-JUN-2006
	25-NOV-2009	2,5,14	19-JUN-2009
	05-JAN-2010	14	25-NOV-2009
	09-JUN-2011	10,11	05-JAN-2010