GE
Water & Process Technologies

Material Safety Data Sheet

Issue Date: 15-NOV-2010
Supercedes: 14-NOV-2007

AMMONIA CYANURATE REAGENT P/P

1 Identification

Identification of substance or preparation
AMMONIA CYANURATE REAGENT P/P

Reagent Application Area
Field test reagent.

Reagent Code
L2348

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: 15-NOV-2010

2 Hazard(s) identification

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EMERGENCY OVERVIEW

DANGER

Corrosive to skin. Corrosive to the eyes. Severe respiratory irritant.

DOT hazard: Corrosive to skin
Odor: Chlorine; Appearance: White, Powder

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:

Severe respiratory irritant.

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 toxicity to the liver, kidney and/or nervous system.

MEDICAL CONDITIONS AGGRAVATED:
Pre-existing skin, lung and eye conditions.

SYMPTOMS OF EXPOSURE:
Inhalation of dusts may cause irritation and/or burns to the respiratory tract. Skin contact can cause moderate irritation to burns (dependent on length of exposure).

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%)
6106-24-7	TARTARIC ACID, DISODIUM SALT, DIHYDRATE Potential irritant	10-20
1310-65-2	LITHIUM HYDROXIDE Corrosive	3-7
2893-78-9	SODIUM DICHLOROISOCYANURATE Strong oxidizer; corrosive when wet	3-7

4 First-aid measures

SKIN CONTACT:
Remove clothing. Wash area with large amounts of soap solution or water for 15 min. Immediately contact physician.

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:
Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get immediate 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

FLASH POINT:

> 200F > 93C P-M(CC)

MISCELLANEOUS:

Corrosive to skin

UN 3262;Emergency Response Guide #154

6 Accidental release measures

PROTECTION AND SPILL CONTAINMENT:

Scoop up spilled material into a large beaker and dissolve with water. Adjust pH between 6 and 9 with an acid, such as sulfuric or citric. Flush reacted material to the drain with a large excess of water.

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:

Contains an oxidizer. Avoid all contact with reducing agents, oils, greases, organics and acids.

STORAGE:

Keep containers closed when not in use. Keep dry. Store away from oxidizers.

8 Exposure controls / personal protection

EXPOSURE LIMITS

CHEMICAL NAME

TARTARIC ACID, DISODIUM SALT, DIHYDRATE

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

LITHIUM HYDROXIDE

PEL (OSHA): NOT DETERMINED

TLV (ACGIH): NOT DETERMINED

SODIUM DICHLOROISOCYANURATE
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.
Respirators should not be needed for this product.
SKIN PROTECTION:
gauntlet-type rubber gloves, chemical resistant apron-- Wash off after each use. Replace as necessary.
EYE PROTECTION:
airtight chemical goggles

9 Physical and chemical properties

Density	NO DATA	Vapor Pressure (mmHG)	NA
Freeze Point (F)	NA	Vapor Density (air=1)	NA
Freeze Point (C)	NA		
Viscosity(cps 70F,21C)	NA	% Solubility (water)	NA

Odor		Chlorine
Appearance		White
Physical State		Powder
Flash Point	P-M(CC)	> 200F > 93C
pH 5% Sol. (approx.)		12.4
Evaporation Rate		NA
Percent VOC:		ND

NA = not applicable ND = not determined

10 Stability and reactivity

CHEMICAL STABILITY:
Stable under normal storage conditions.
POSSIBILITY OF HAZARDOUS REACTIONS:
Contact with oxidizers may cause fire.
INCOMPATIBILITIES:
Decomposes dry(350-475F); Wet(75F) with release of chlorine. Reacts with oxidizers.
DECOMPOSITION PRODUCTS:
oxides of carbon

11 Toxicological information

Oral LD50 RAT:	>2,000 mg/kg
NOTE - Estimated value	
Dermal LD50 RABBIT:	>2,000 mg/kg
NOTE - Estimated value	

12 Ecological information

AQUATIC TOXICOLOGY
No Data Available.

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: Corrosive to skin
DOT: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.(LITHIUM HYDROXIDE MIXTURE)
8, UN 3262, PG II
DOT EMERGENCY RESPONSE GUIDE #: 154
Note: Some containers may be DOT exempt, please check BOL for exact container classification
IATA: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.(LITHIUM HYDROXIDE MIXTURE)
8, UN 3262, PG II
IMDG: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S.(LITHIUM HYDROXIDE MIXTURE)
8, UN 3262, PG II

15 Regulatory information

TSCA:
Components(s) of this material are Hydrates of TSCA listed Anhydrous chemicals. Any other component is specifically listed on TSCA.
CERCLA AND/OR SARA REPORTABLE QUANTITY (RQ):
No regulated constituent present at OSHA thresholds
NSF Registered and/or meets USDA (according to 1998 Guidelines):
Registration number: Not Registered
SARA SECTION 312 HAZARD CLASS:
Immediate(acute);Delayed(Chronic);Reactive
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

CAS#	CHEMICAL NAME
1310-65-2	LITHIUM HYDROXIDE

16 Other information

HMIS vII		**CODE TRANSLATION**
Health	3	Serious Hazard
Fire	1	Slight Hazard
Reactivity	1	Slight Hazard
Special	CORR	DOT corrosive
(1) Protective Equipment	C	Goggles,Gloves,Apron

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

CHANGE LOG

	EFFECTIVE DATE	REVISIONS TO SECTION:	SUPERCEDES
MSDS status:	22-AUG-1995	REVISED FORMAT	** NEW **
	04-DEC-1995	2,8,15	22-AUG-1995
	26-MAR-2001	15	04-DEC-1995
	01-SEP-2006	3,5,14	26-MAR-2001
	14-NOV-2007	2,3,4,5,6,8	01-SEP-2006
	15-NOV-2010	8,10,14	14-NOV-2007