Version: 1.3

Effective Date: Sep-26-2014 Previous Date: Mar-20-2014



SAFETY DATA SHEET

METCLEAR* MR2416

1. Product and Company Identification

Material name METCLEAR MR2416

Version # 1.3

Revision date Sep-26-2014 Supersedes date Mar-20-2014

Chemical description Aqueous solution of organic salts

CAS # Mixture

Product application 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

2. Hazards Identification

Emergency overview WARNING

May cause moderate irritation to the skin. Severe irritant to the eyes. Mists/aerosols may cause

irritation to upper respiratory tract.

Potential health effects

Eyes Severe irritant to the eyes.

Skin Primary route of exposure May cause moderate irritation to the skin.

Inhalation Mists/aerosols may cause irritation to upper respiratory tract.

IngestionMay cause gastrointestinal irritationTarget organsNo evidence of potential chronic effects.

Medical conditions aggravated by

exposure

None known.

3. Composition / Information on Ingredients

Hazardous components	CAS#	Percent	
AROMATIC HETEROCYCLE	TSRN 125438 - 11820		
Non-hazardous components	CAS#		
Water	7732-18-5		

4. First Aid Measures

First aid procedures

Eye contact Keep eyelids apart.

Skin contact Remove contaminated clothing.

Rinse mouth with water. Do not feed anything by mouth to an unconscious or convulsive victim. Do NOT Ingestion

induce vomiting! Dilute contents of stomach using 2-8 fluid ounces (60-240ml) of milk or water.

5. Fire Fighting Measures

Extinguishing media

Unsuitable extinguishing

None.

media

Protection of firefighters

Specific hazards arising from

the chemical

Oxides of carbon, nitrogen, and sulphur evolved in fire.

Fire fighting

equipment/instructions

Fire fighters should wear positive pressure self-contained breathing apparatus (full face-piece type).

6. Accidental Release Measures

Personal precautions Protective clothing.

Environmental precautions Prevent from entering sewers or the immediate environment.

Accidental release of large quantities into the aquatic environment may harm aquatic organisms.

7. Handling and Storage

Alkaline Handling

Do not mix with acidic material.

Store in cool, well ventilated area. Storage

Protect from freezing.

Store containers closed when not in use.

8. Exposure Controls / Personal Protection

No exposure limits noted for ingredient(s). Occupational exposure limits

No biological exposure limits noted for the ingredient(s). **Biological limit values**

Ensure good ventilation. **Engineering controls**

Personal protective equipment

Splash proof chemical goggles. Eye / face protection

Impervious gloves. Wash off after each use. Replace as necessary. Skin protection

9. Physical & Chemical Properties

Appearance

Physical state Liquid

Color Yellow Colorless to yellow

Odor Slight

Odor threshold Not available.

12.4 pH (concentrated product)

12 (5% SOL.) pH in aqueous solution Vapor pressure 18 mm Hg 70 °F (21 °C) Vapor pressure temp. < 1 (Air = 1)Vapor density 214 °F (101 °C) **Boiling** point 25 °F (-4 °C) Melting point/Freezing point Solubility (water) 100 %

Flash point > 200 °F (> 93 °C) P-M(CC)

Flammability limits in air, upper,

Specific gravity (70°F, 21°C)

% by volume

Not available.

1.13

Flammability limits in air, lower,

% by volume

Not available.

Auto-ignition temperature Not available.

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Evaporation rate

Viscosity 10 cps Viscosity temperature 70 °F (21 °C) Pour point 30 °F (-1 °C)

10. Chemical Stability & Reactivity Information

Chemical stability Material is stable under normal conditions.

Conditions to avoidNo special requirement.

Incompatible materials Avoid contact with strong acids and oxidisers.

Hazardous decomposition

Oxides of carbon, nitrogen, and sulphur evolved in fire.

products

Product

Possibility of hazardous reactions Hazardous polymerization does not occur.

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11. Toxicological Information

Toxicological data

Troduct	Species	rest nesuits		
METCLEAR MR2416 (CAS Mixture)				
Acute				
Dermal				
LD50	Rat	> 2000 mg/kg		
Oral				
LD50	Rat	7878 mg/kg		
Components	Species	Test Results		

Tost Results

AROMATIC HETEROCYCLE (CAS TSRN 125438 - 11820)

Acute Oral

LD50 Rat 7878 mg/kg

SensitizationNot classified.Acute effectsNot classified.CarcinogenicityNot classified.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Skin corrosion/irritationNot classified.MutagenicityNot classified.Reproductive effectsNot classified.

Symptoms and target organs Symptoms on eyes may develop from tearing with development into irritation. Symptoms on skin may

develop redness and itching.

12. Ecological Information

Ecotoxicity

Product		Species	Test Results
METCLEAR MR2416 (CA	S Mixture)		
	LC50	Fathead Minnow	190.1 mg/l, Static Acute Bioassay, 96 hour
Crustacea	EC50	Daphnia magna	253 mg/l, Static Acute Bioassay, 48 hour

Persistence and degradability

No data available

13. Disposal Considerations

Disposal instructions According to Hazardous Waste Regulations.

Via an authorized waste disposal contractor to an approved waste disposal site, observing all local and

national regulations.

Contaminated packaging According to Hazardous Waste Regulations.

Via an authorized waste disposal contractor to an approved waste disposal site, observing all local and

national regulations.

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14. Transport Information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

TDG

Not regulated as a dangerous good.

15. Regulatory Information

US federal regulations

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

None listed

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA (Superfund) reportable quantity, lbs

None listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No

Delayed Hazard - No Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

No

chemical

Inventory status

Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

^{*}A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

State regulations

US - California Proposition 65 - CRT: Listed date/Carcinogenic substance

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Developmental toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Female reproductive toxin

No ingredient listed.

US - California Proposition 65 - CRT: Listed date/Male reproductive toxin

No ingredient listed.

US - Massachusetts RTK - Substance List

Not regulated.

US - Pennsylvania RTK - Hazardous Substances

Not regulated.

US - Rhode Island RTK

Not regulated.

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A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other Information

List of abbreviations CAS: Chemical Abstract Service Registration Number

TSRN indicates a Trade Secret Registry Number is used in place of the CAS number.

ACGIH: American Conference of Governmental Industrial Hygienists

NOEL: No Observed Effect Level STEL: Short Term Exposure Limit LC50: Lethal Concentration, 50% TWA: Time Weighted Average BOD: Biochemical Oxygen Demand COD: Chemical Oxygen Demand TOC: Total Organic Carbon

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods Code

LD50: Lethal Dose, 50%

NFPA: National Fire Protection Association

HMIS® ratings Health: 2

Flammability: 0 Physical hazard: 0 Personal protection: B

NFPA ratings Health: 2

Flammability: 0 Instability: 0

Special hazards: NONE

This data sheet contains changes

from the previous version in

section(s):

First Aid Measures: Inhalation

Exposure Controls / Personal Protection: General hygiene considerations

Toxicological Information: Symptoms and target organs

GHS: Classification

Prepared by This MSDS has been prepared by GE Water & Process Technologies Regulatory Department

(1-215-355-3300).

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