Version: 2.0

Effective Date: Feb-10-2015 Previous Date: Mar-27-2013



SAFETY DATA SHEET

POLYFLOC* AP1720

1. Product and Company Identification

Material name POLYFLOC AP1720

Version # 2.0

Revision dateFeb-10-2015Supersedes dateMar-27-2013Product applicationFlocculant

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 May cause slight irritation to the skin. May cause moderate irritation to the eyes. Dusts may cause

irritation to the upper respiratory tract.

Potential health effects

Eyes May cause moderate irritation to the eyes.

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

Inhalation Primary route of exposure Dusts of this product may cause irritation of the nose, throat, and respiratory

tract.

IngestionMay cause slight gastrointestinal irritation.Target organsNo evidence of potential chronic effects.

Signs and symptoms Inhalation may cause irritation of respiratory tract. May cause redness or itching of skin.

Medical conditions aggravated by

exposure

None known.

3. Composition / Information on Ingredients

Non-hazardous components	CAS #
NON-DOZOFOOUS COMPONENTS	(A > 4

Carboxylated Polyacrylamide TSRN 125438 - 11883

Composition comments

Information for specific product ingredients as required by the U.S. OSHA HAZARD COMMUNICATION

STANDARD is listed. Refer to additional specifies of this MSDS for our assessment of the potential bazars

STANDARD is listed. Refer to additional sections of this MSDS for our assessment of the potential hazards of this formulation.

4. First Aid Measures

First aid procedures

Inhalation Move to fresh air. If breathing stops, provide artificial respiration. For breathing difficulties, oxygen may

be necessary. Get medical attention immediately.

Skin contact Wash off with soap and water. Take off contaminated clothing and wash before reuse. Get medical

attention if irritation develops and persists.

Eye contact Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present

and easy to do. Get medical attention immediately. Keep eyelids apart.

Ingestion If swallowed, rinse mouth with water (only if the person is conscious). Never give anything by mouth to a

victim who is unconscious or is having convulsions. Do not induce vomiting. Dilute contents of stomach

using 2-8 fluid ounces (60-240ml) of milk or water. Immediately contact a physician.

Notes to physician No specific antidotes are recommended.

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media Dry chemical, CO2, water spray or regular foam. Foam or water create a slippery condition. Spread sand

or grit.

Protection of firefighters

Protective equipment and precautions for firefighters

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand

breathing apparatus, protective clothing and face mask.

Fire fighting

equipment/instructions

In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk.

Cool containers / tanks with water spray.

6. Accidental Release Measures

Personal precautions Wear appropriate protective equipment and clothing during clean-up. Avoid contact with spilled

material. See Section 8 of the MSDS for Personal Protective Equipment.

Environmental precautionsAvoid discharge into drains, water courses or onto the ground. Water contaminated with this product

may be sent to a sanitary sewer treatment facility, or a permitted waste treatment facility, in

accordance with any local agreements.

Methods for cleaning up Ventilate area, use specified protective equipment. Sweep up and remove. Minimize dust generation.

7. Handling and Storage

Handling No special precautions are necessary beyond normal good hygiene practices. See Section 8 of the MSDS

for additional personal protection advice when handling this product.

Storage Keep container tightly closed in a dry and well-ventilated place. Avoid moisture contamination. Store at

ambient temperature.

8. Exposure Controls / Personal Protection

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

Biological limit valuesNo biological exposure limits noted for the ingredient(s).

Engineering controlsExplosion-proof general and local exhaust ventilation. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process

enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to

an acceptable level. Bulk tanks should be vented externally.

Personal protective equipment

Eye / face protection Chemical goggles are recommended. Splash proof chemical goggles.

Skin protection Wear suitable protective clothing. Chemical resistant gloves. The type of protective equipment must be

selected according to the concentration and amount of the dangerous substance at the specific workplace. Chemical resistant apron. Glove selection must take into account any solvents and other

hazards present.

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. If air-purifying respirator use is appropriate, use organic vapor cartridges and any of the following

particulate respirators: R95, R99, R100, P95, P99 or P100.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. Physical & Chemical Properties

Appearance

Physical state Granules

Color White to off-white

Odor Mild

Odor threshold Not available.

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pH in aqueous solution 7.8 (0.5% SOL.)
Vapor pressure < 0.1 mm HgVapor pressure temp. 70 °F (21 °C)
Vapor density < 1 (Air = 1)Boiling point Not available.
Melting point/Freezing point Not available.

Solubility (water) 1 %

Specific gravity (70°F, 21°C) Not available.

Flash point $> 213 \, ^{\circ}\text{F} (> 101 \, ^{\circ}\text{C}) \, \text{P-M(CC)}$

Flammability limits in air, upper,

% by volume

Not available.

Flammability limits in air, lower,

% by volume

Not available.

Auto-ignition temperatureNot available.Evaporation rate< 1 (Ether = 1)Viscosity temperature $70 \,^{\circ}\text{F} \, (21 \,^{\circ}\text{C})$ Percent volatile0 (Estimated)

10. Chemical Stability & Reactivity Information

Reactivity The product is stable and non-reactive under normal conditions of use, storage and transport.

Chemical stability Material is stable under normal conditions.

Conditions to avoid Not available.

Incompatible materialsStrong oxidizing substances.Hazardous decompositionOxides of carbon and nitrogen.

products

Possibility of hazardous reactions Hazardous polymerization does not occur.

11. Toxicological Information

Toxicological data

Product	Species	Test Results
POLYFLOC AP1720		
Acute		
Oral		
LD50	Rat	> 5000 mg/kg

Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Symptoms and target organs

Prolonged and repetitive exposure, depending on the route(s), may develop transient irritation on skin, eyes, ingestion tract, and/or respiratory tract.

12. Ecological Information

Ecotoxicity

Product		Species	Test Results
POLYFLOC AP1720			
	IC50	Scenedesmus (algae)	> 100 mg/l, Acute Toxicity, 72 hour
	LC50	Zebra Fish	> 100 mg/l, Acute Toxicity, 96 hour
Aquatic			
Crustacea	EC50	Daphnia magna	> 100 mg/l, Acute Toxicity, 48 hour

13. Disposal Considerations

Disposal instructions Waste from residues / unused products Dispose of contents/container in accordance with local/regional/national/international regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner.

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Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport Information

DOT

Not regulated as dangerous goods.

Some containers may be DOT exempt, please check BOL for exact container classification.

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

United States & Puerto Rico

No

chemical

Inventory status

Country(s) or region Inventory name

On inventory (yes/no)*

Yes

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

Toxic Substances Control Act (TSCA) Inventory

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).

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.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

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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: 1

Flammability: 1 Physical hazard: 0 Personal protection: B

NFPA ratings Health: 1

Flammability: 1 Instability: 0

Special hazards: NONE

Disclaimer The information provided in this Safety Data Sheet is correct to the best of our knowledge, information

and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process,

unless specified in the text.

This data sheet contains changes

from the previous version in

section(s):

HazReg Data: International Inventories

GHS: Classification

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

(1-215-355-3300).

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