Version: 3.0 Effective Date: 19/11/2013 Previous Date: 19/11/2013



SAFETY DATA SHEET

PETROFLO* 23Y957

1. Product and Company Identification

Material name PETROFLO 23Y957

Version # 3.0

Revision date19/11/2013Supersedes date19/11/2013Chemical descriptionPolymer solution

CAS # Mixture
Product application Antifoam

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 CAUTION

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

cause irritation to 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 Vapors, gases, mists or aerosols may cause irritation to the upper respiratory tract.

Ingestion May cause slight gastrointestinal irritation with possible nausea, vomiting, diarrhea, incoordination,

mental confusion, dizziness and lethargy.

Target organsNo evidence of potential chronic effects.Signs and symptomsMay cause redness or itching of skin.

Medical conditions aggravated by None known.

exposure

3. Composition / Information on Ingredients

 Non-hazardous components
 CAS #

 Alkylene oxide block polymer
 9003-11-6

Composition comments

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.

4. First Aid Measures

First aid procedures

Eye contact Remove contact lenses. Keep eyelids apart.

Flush immediately with plenty of running water.

Seek medical attention.

Skin contact Remove contaminated clothing.

Wash thoroughly with soap and water. If irritation persists, seek medical advice.

Inhalation If nasal, throat or lung irritation develops. Remove to fresh air.

Seek medical attention.

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

Do NOT induce vomiting! Immediately contact a physician.

If the victim is fully conscious dilute contents of stomach using 3-4 glasses of water.

Notes to physicianNo other instruction than the ones already informed.

5. Fire Fighting Measures

Extinguishing media

Suitable extinguishing media Co

Carbon dioxide, dry chemicals, foam, water spray (fog).

Unsuitable extinguishing

media

None.

Protection of firefighters

Specific hazards arising from

the chemical

Oxides of carbon evolved in fire.

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

Use standard firefighting procedures and consider the hazards of other involved materials.

equipment/instructions

Hazardous combustion products Oxides of carbon

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.

Methods for cleaning upVentilate area, use specified protective equipment.

Absorb onto inert material and dispose of according to Controlled Waste Regulations.

Remove small spills with plenty of water.

Wet area may be slippery. Spread sand/grit. 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.

7. Handling and Storage

HandlingNormal chemical handling.StorageStore in cool, well ventilated area.

Store away from oxidizers.

Store containers closed when not in use.

8. Exposure Controls / Personal Protection

Engineering controls Ensure good ventilation.

Personal protective equipment

Eye / face protection Safety goggles.

Splash proof chemical goggles.

Skin protection Protective clothing if splashing or repeated contact with product is likely.

Respiratory protection Not required. If air-purifying respirator use is appropriate, use any of the following particulate

respirators: N95, N99, N100, R95, R99, R100, P95, P99 or P100.

General hygiene considerations

Wash hands after handling.

Material name: PETROFLO* 23Y957 Page: 2 / 6

Version number: 3.0

9. Physical & Chemical Properties

Appearance

Physical state Liquid

Color Colorless to light yellow

Odor Mild

Odor thresholdNot available.pH in aqueous solution5.5 (5% SOL.)Vapor pressure< 1 mm Hg</th>Vapor pressure temp.70 °F (21 °C)Vapor density> 1 (Air = 1)Boiling pointNot available.Melting point/Freezing point-15 °F (-26 °C)

Solubility (water) 1 % Specific gravity (70°F, 21°C) 1.01

Flash point $> 200 \, ^{\circ}\text{F} (> 93 \, ^{\circ}\text{C}) \, P\text{-M(CC)}$

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)Viscosity325 cps

Viscosity temperature 70 °F (21 °C)

Percent volatile 0 (Estimated)

Pour point -10 °F (-23 °C)

10. Chemical Stability & Reactivity Information

Chemical stability Material is stable under normal conditions.

Conditions to avoid Not available.

Incompatible materialsAvoid contact with strong oxidizers.Hazardous decompositionOxides of carbon evolved in fire.

products

Possibility of hazardous reactions Not applicable.

11. Toxicological Information

Toxicological data

Product	Species Test Results		
PETROFLO 23Y957 (CAS Mixture)			
Acute			
Dermal			
LD50	Rabbit	> 5000 mg/kg, (Calculated according to GHS additivity formula)	
Oral			
LD50	Rat	> 5000 mg/kg, (Calculated according to GHS additivity formula)	
Acute effects	Not classified.		
Carcinogenicity	Not classified. Ames Assay BACTERIA: POSITIVE		
Skin corrosion/irritation	Not classified.		
Mutagenicity	Not classified.		
Reproductive effects	Not classified.		

Material name: PETROFLO* 23Y957 Page: 3 / 6

12. Ecological Information

Ecotoxicity

Product		Species	Test Results
PETROFLO 23Y957 (CAS	Mixture)		
	LC50	Fathead Minnow	695 mg/L, Static Renewal Bioassay, 96 hour
Crustacea	LC50	Daphnia magna	880 mg/L, Static Renewal Bioassay, 48 hour
	NOEL	Daphnia magna	312 mg/L, Static Renewal Bioassay, 48 hour

Persistence and degradability

> 60 % degradation in 28 days

CO2 Evolution (Modified Sturm Test) (OECD 301B)
Testing has shown product to be readily biodegradable.

- COD (mgO2/g) 2040
- BOD 5 (mgO2/g) 5
- BOD 28 (mgO2/g) 9
- Closed Bottle Test (% 0
Degradation in 28 days)
- Zahn-Wellens Test (% 7
Degradation in 28 days)
- TOC (mg C/g) 540

13. Disposal Considerations

Waste codes Industrial Liquid Waste

Disposal instructions According to Controlled Waste Regulations.

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

national regulations.

Contaminated packagingDo not dispose the product and package to sewer and environment. According to Controlled Waste

Regulations.

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

national regulations.

14. Transport Information

DOT

Not regulated as dangerous goods.

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

TDG

Not regulated as a dangerous good.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

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

None listed.

Material name: PETROFLO* 23Y957 Page: 4 / 6

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

No

SARA 311/312 Hazardous

Yes

chemical

Clean Water Act (CWA) Hazardous substance

Inventory status

Country(s) or regionInventory nameOn inventory (yes/no)*CanadaDomestic Substances List (DSL)YesCanadaNon-Domestic Substances List (NDSL)NoUnited States & Puerto RicoToxic Substances Control Act (TSCA) InventoryYes

Food and drug administration 21 CFR 176.210 & 176.200 (antifoams approved for use in wet end applications and in coating

formulations)

State regulations

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

1,4-DIOXANE (CAS 123-91-1)Listed: January 1, 1988 Carcinogenic.Ethylene oxide (oxirane) (CAS 75-21-8)Listed: July 1, 1987 Carcinogenic.Propylene oxide (CAS 75-56-9)Listed: October 1, 1988 Carcinogenic.

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

Ethylene oxide (oxirane) (CAS 75-21-8) Listed: August 7, 2009 Developmental toxin.

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

Ethylene oxide (oxirane) (CAS 75-21-8)

Listed: February 27, 1987 Female reproductive toxin.

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

Ethylene oxide (oxirane) (CAS 75-21-8) Listed: August 7, 2009 Male reproductive toxin.

US - Massachusetts RTK - Substance List

Not regulated.

US - Pennsylvania RTK - Hazardous Substances

Not regulated.

US - Rhode Island RTK

Not regulated.

16. Other Information

List of abbreviations CAS: Chemical Abstract Service Registration Number

TWA: Time Weighted Average STEL: Short Term Exposure Limit LD50: Lethal Dose, 50%

LC50: Lethal Concentration, 50% NOEL: No Observed Effect Level COD: Chemical Oxygen Demand BOD: Biochemical Oxygen Demand

TOC: Total Organic Carbon

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods Code

NFPA: National Fire Protection Association

ACGIH: American Conference of Governmental Industrial Hygienists

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

HMIS® ratings Health: 1

Flammability: 1 Physical hazard: 0 Personal protection: B

NFPA ratings Health: 1

Flammability: 1 Instability: 0

Special hazards: NONE

Material name: PETROFLO* 23Y957 Page: 5 / 6

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

Prepared by

This MSDS has been prepared by GE Water & Process Technologies Regulatory Department (1-215-355-3300).

* Trademark of General Electric Company. May be registered in one or more countries.

Material name: PETROFLO* 23Y957 Version number: 3.0