Version: 4.0

Effective Date: Dec-19-2019 Previous Date: Feb-07-2018



SAFETY DATA SHEET POLYFLOC* CE1646

1. Identification

Product identifier POLYFLOC CE1646

Other means of identification None.

Recommended use Flocculant

Recommended restrictions None known.

Company/undertaking identification

SUEZ WTS USA, Inc. 4636 Somerton Road Trevose, PA 19053

T 215 355 3300, F 215 953 5524

Emergency telephone

(800) 877 1940

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.

Hazard statement The material is not hazardous under the criteria of the Federal OSHA Hazard Communication

Standard's (29CFR 1910.1200) implementation of the Globally Harmonized System (GHS), i.e.,

material is not a dangerous substance or mixture requiring GHS classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

The manufacturer lists no ingredients as hazardous according to OSHA 29 CFR 1910.1200.

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 SDS for our

assessment of the potential hazards of this formulation.

4. First-aid measures

Inhalation If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing.

Call a physician if symptoms develop or persist.

Skin contact Rinse skin with water/shower. Get medical attention if irritation develops and persists.

Rinse with water. Get medical attention if irritation develops and persists. Eye contact

Rinse mouth. Get medical advice/attention if you feel unwell. Ingestion

Most important

symptoms/effects, acute and

delayed

Indication of immediate medical attention and special

treatment needed

Treat symptomatically.

Not available.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to

protect themselves.

5. Fire-fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Specific hazards arising from the chemical

Special protective equipment

Fire fighting

and precautions for firefighters

equipment/instructions

Specific methods

During fire, gases hazardous to health may be formed.

Alcohol resistant foam. Powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and face mask.

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.

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

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up Keep unnecessary personnel away. For personal protection, see section 8 of the SDS. Spills are very slippery.

Use water spray to reduce vapors or divert vapor cloud drift.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS.

Avoid discharge into drains, water courses or onto the ground. **Environmental precautions**

7. Handling and storage

Precautions for safe handling

Avoid prolonged exposure. Use care in handling/storage. Spills are very slippery.

Conditions for safe storage. including any incompatibilities

Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS). Do not freeze. If frozen, thaw completely and mix thoroughly prior to use.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components Type Value Adipic acid (CAS 124-04-9) **TWA** 5 mg/m3 **US. NIOSH: Pocket Guide to Chemical Hazards** Components Value Type ALIPHATIC SOLVENT **TWA** 100 mg/m3

(CAS TSRN 125438 -5133P)

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

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Appropriate engineering controls

Good general ventilation 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.

Individual protection measures, such as personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection Wear appropriate chemical resistant gloves. Glove selection must take into account any solvents

and other hazards present. Suitable gloves can be recommended by the glove supplier.

Other Wear appropriate chemical resistant clothing.

Respiratory protection If engineering controls do not maintain airborne concentrations below recommended exposure

limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. 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.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Color White to off-white

Physical state Emulsion
Odor Slight

Odor threshold Not available. pH (concentrated product) Not available.

pH in aqueous solution 5 (5% EMULSION)

Melting point/freezing point < 32 °F (< 0 °C)

Initial boiling point and boiling Not available.

range

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

Evaporation rate < 1 (Ether = 1)
Flammability (solid, gas) Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower Not available.

(%)

Flammability limit - upper Not available.

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Not available.

Vapor density (Air = 1)

Relative density Not available.

Relative density temperature 70 °F (21 °C)

Solubility(ies)

Solubility (water) Not available.

Partition coefficient Not available.

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.ViscosityNot available.

Other information

Viscosity temperature

Explosive properties Not explosive.

70 °F (21 °C)

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Oxidizing properties Not oxidizing. Pour point $< 32 \,^{\circ}\text{F} (< 0 \,^{\circ}\text{C})$

VOC 25 % (SUPPLIER DATA)

10. Stability and reactivity

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

Chemical stability Material is stable under normal conditions.

Possibility of hazardous

reactions

Contact with strong acids may cause a violent reaction releasing heat. Contact with oxidizers may cause fire or explosion.

Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with

Test Results

incompatible materials. None under normal conditions.

Incompatible materials Strong oxidizing agents.

Hazardous decomposition

Oxides of carbon and nitrogen, hydrogen chloride.

products

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contactProlonged or repeated contact may cause irritation.Eye contactDirect contact with eyes may cause temporary irritation.

Ingestion May cause slight gastrointestinal irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Not available.

Species

Information on toxicological effects

Acute toxicity

Product

POLYFLOC CE1646 (CAS	Mixture)	
Acute		
Dermal		
LD50	Rabbit	> 5000 mg/kg, (Calculated according to GHS additivity formula)
Inhalation		
LC50	Rat	> 20 mg/l, 4 Hours, (Calculated according to GHS additivity formula)
Oral		
LD50	Rat	> 5000 mg/kg, (Calculated according to GHS additivity formula)
Components	Species	Test Results
Adipic acid (CAS 124-04-9)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 7.7 mg/l, 4 Hour
Oral		
LD50	Rat	> 2000 mg/kg
ALIPHATIC SOLVENT (CA	S TSRN 125438 - 5133P)	
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 5.2 mg/l, 4 Hour

Material name: POLYFLOC* CE1646

Components Species Test Results

Oral

LD50 Rat > 5000 mg/kg

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicityNo data available to indicate product or any components present at greater than 0.1% are

mutagenic or genotoxic.

Carcinogenicity Not classified.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicityThis product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazardDoes not result in classification of the mixture if the kinematic viscosity is greater than 20.5

mm2/sec measured at 40C.

Chronic effects Prolonged inhalation may be harmful.

Further information This product has no known adverse effect on human health.

12. Ecological information

Ecotoxicity

Product		Species	lest Results		
POLYFLOC CE1646 (CAS Mixture)					
Aquatic					
Crustacea	LC50	Daphnia magna	50 mg/L, Estimated Acute Toxicity, 48 H, (Estimated)		
Fish	LC50	Fish	100 mg/L, Estimated Acute Toxicity, 96 H, (Estimated)		

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

ALIPHATIC SOLVENT 3 - 6
Adipic acid 0.08

Bioconcentration factor (BCF)

ALIPHATIC SOLVENT 207.7

Mobility in soil No data available.

Persistence and degradability

Other adverse effects

No data is available on the degradability of any ingredients in the mixture.

13. Disposal considerations

Disposal instructionsCollect and reclaim or dispose in sealed containers at licensed waste disposal site.

Local disposal regulations Dispose in accordance with all applicable regulations.

Not available.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

Waste from residues / unused

products

Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

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Contaminated packaging

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

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations

This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard

Communication Standard, 29 CFR 1910.1200.

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Adipic acid (CAS 124-04-9)

Listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

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

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

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)

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).

US state regulations

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

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.

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US - California Proposition 65 - CRT: Listed date/Male reproductive toxin No ingredient listed.

16. Other information, including date of preparation or last revision

Issue date Feb-20-2015
Revision date Dec-19-2019

Version # 4.0

NFPA ratings Health: 0
Flammability: 0

Instability: 0

NFPA ratings



List of abbreviations CAS: Chemical Abstract Service Registration Number

NFPA: National Fire Protection Association

DOT: Department of Transportation (49 CFR 172.101).

IATA: International Air Transport Association

IMDG: International Maritime Dangerous Goods Code OSHA: Occupational Safety & Health Administration.

References: No data available

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.

Revision informationThis document has undergone significant changes and should be reviewed in its entirety.

Prepared by This SDS has been prepared by SUEZ Regulatory Department (1-215-355-3300).

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