

## Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations SDS ID: 8169333

Issue date: 17.05.2023 Revision date: 18.12.2023 Version: 1.1

## **SECTION 1: Identification**

#### 1.1. Identification

Product form : Substance

Substance name : 2-(Perfluorooctanesulfonamido)acetic acid

CAS-No. : 2806-24-8
Product code : 8169-3-33
Formula : C10H4F17NO4S

Synonyms : N-(Perfluorooctanesulfonyl)glycine

Other means of identification : MFCD25961854

#### 1.2. Recommended use and restrictions on use

Use of the substance/mixture : Laboratory chemicals

Manufacture of substances

Scientific research and development

### 1.3. Supplier

SynQuest Laboratories, Inc. Inc.

P.O. Box 309

Alachua, FL, Alachua, 32615 United States of America

T (386) 462-0788 - F (386) 462-7097

info@synquestlabs.com - www.synquestlabs.com

#### 1.4. Emergency telephone number

Emergency number : (844) 523-4086 (3E Company - Account 10069)

#### **SECTION 2: Hazard(s) identification**

## 2.1. Classification of the substance or mixture

#### **GHS US classification**

Skin corrosion/irritation Category 2 H315 Causes skin irritation
Serious eye damage/eye irritation Category 1 H318 Causes serious eye damage

Specific target organ toxicity – Single exposure, Category 3, H335 May cause respiratory irritation

Respiratory tract irritation

Full text of H statements: see section 16

## 2.2. GHS Label elements, including precautionary statements

## **GHS US labeling**

Hazard pictograms (GHS US)





Signal word (GHS US) : Danger

Hazard statements (GHS US) : H315 - Causes skin irritation

H318 - Causes serious eye damage
H335 - May cause respiratory irritation
P261 - Avoid breathing dust, mist, spray.

Precautionary statements (GHS US) : P261 - Avoid breathing dust, mist, spray.
P264 - Wash skin thoroughly after handling

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P271 - Use only outdoors or in a well-ventilated area.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 - If on skin: Wash with plenty of soap and water

P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P310 - Immediately call a POISON CENTER or doctor/ physician

P321 - Specific treatment (see supplemental first aid instructions on this label)

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P362+P364 - Take off contaminated clothing and wash it before reuse.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container to an approved waste disposal plant

#### 2.3. Other hazards which do not result in classification

No additional information available

#### 2.4. Unknown acute toxicity (GHS US)

No additional information available

## **SECTION 3: Composition/Information on ingredients**

#### 3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%	GHS US classification
2-(Perfluorooctanesulfonamido)acetic acid (Main constituent)	CAS-No.: 2806-24-8		Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

## 3.2. Mixtures

Not applicable

## **SECTION 4: First-aid measures**

#### 4.1. Description of first aid measures

First-aid measures general

: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Move the affected personnel away from the contaminated area.

: Remove person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Get immediate medical advice/attention.

: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Get immediate medical advice/attention.

: Immediately flush eyes thoroughly with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.

: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get immediate medical advice/attention.

First-aid measures after ingestion

First-aid measures after inhalation

First-aid measures after skin contact

First-aid measures after eye contact

#### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects

: The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

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Symptoms/effects after inhalation

: Material is destructive to tissue of the mucuous membranes and upper respiratory tract. Cough, shortness of breath, headache, nausea.

## 4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

## **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media

: Alcohol resistant foam. Carbon dioxide. Dry powder. Water spray. Use extinguishing media appropriate for surrounding fire.

## 5.2. Specific hazards arising from the chemical

Fire hazard

: Thermal decomposition generates: Carbon oxides. Hydrogen fluoride. Nitrogen oxides.

#### 5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions

: In case of fire: Evacuate area.

Protection during firefighting

: Wear gas tight chemically protective clothing in combination with self contained breathing apparatus. For further information refer to section 8: "Exposure controls/personal protection".

## **SECTION 6: Accidental release measures**

#### 6.1. Personal precautions, protective equipment and emergency procedures

General measures

: Evacuate unnecessary personnel. Ensure adequate air ventilation. Do not breathe dust.

### 6.1.1. For non-emergency personnel

**Emergency procedures** 

: Only qualified personnel equipped with suitable protective equipment may intervene.

## 6.1.2. For emergency responders

Protective equipment

: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

#### 6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

## 6.3. Methods and material for containment and cleaning up

For containment

Other information

: Stop leak if safe to do so.

Methods for cleaning up

Sweep or shovel spills into appropriate container for disposal. Minimize generation of dust.
For disposal of solid materials or residues refer to section 13: "Disposal considerations".

#### 6.4. Reference to other sections

No additional information available

## **SECTION 7: Handling and storage**

## 7.1. Precautions for safe handling

Precautions for safe handling

: Do not handle until all safety precautions have been read and understood. Ensure good ventilation of the work station. Do not breathe dust, mist, spray. Wear personal protective

equipment. Avoid contact with skin and eyes.

Hygiene measures

: Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

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#### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep container closed when not in use. Hygroscopic. Keep contents under inert gas.

Incompatible materials : Refer to Section 10 on Incompatible Materials.

Storage area : Store in dry, cool, well-ventilated area.

## **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

#### 2-(Perfluorooctanesulfonamido)acetic acid (2806-24-8)

No additional information available

#### 8.2. Appropriate engineering controls

Appropriate engineering controls

: Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

#### 8.3. Individual protection measures/Personal protective equipment

#### Hand protection:

protective gloves. 29 CFR 1910.138: Hand Protection

#### Eye protection:

Chemical goggles or safety glasses. Face shield. 29 CFR 1910.133: Eye and Face Protection

#### Skin and body protection:

Wear suitable protective clothing

#### Respiratory protection:

In case of inadequate ventilation wear respiratory protection. 29 CFR 1910.134: Respiratory Protection

#### Personal protective equipment symbol(s):









#### Other information:

Safety shoes. 29 CFR 1910.136: Foot Protection.

## **SECTION 9: Physical and chemical properties**

#### 9.1. Information on basic physical and chemical properties

Physical state : Solid

Color : No data available Odor : No data available Odor threshold : No data available Hq : No data available : No data available Melting point : No data available Freezing point Boiling point : No data available Flash point : No data available

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Relative evaporation rate (butyl acetate=1) : No data available Flammability (solid, gas) : No data available Vapor pressure : No data available Relative vapor density at 20 °C : No data available Relative density : No data available Molecular mass : 557,18 g/mol Solubility No data available Partition coefficient n-octanol/water (Log Pow) : No data available Auto-ignition temperature No data available : No data available Decomposition temperature Viscosity, kinematic : No data available Viscosity, dynamic : No data available **Explosion limits** : No data available Explosive properties : No data available Oxidizing properties : No data available

#### 9.2. Other information

No additional information available

## **SECTION 10: Stability and reactivity**

### 10.1. Reactivity

No additional information available

#### 10.2. Chemical stability

The product is stable at normal handling and storage conditions.

### 10.3. Possibility of hazardous reactions

No additional information available

#### 10.4. Conditions to avoid

Keep away from heat, sparks and flame.

## 10.5. Incompatible materials

Strong oxidizing agents.

## 10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced. Hazardous decomposition products in case of fire, see Section 5.

## **SECTION 11: Toxicological information**

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitization : Not classified Germ cell mutagenicity : Not classified Carcinogenicity : Not classified

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Reproductive toxicity : Not classified

STOT-single exposure : May cause respiratory irritation.

STOT-repeated exposure : Not classified
Aspiration hazard : Not classified
Viscosity, kinematic : No data available

Symptoms/effects : The most important known symptoms and effects are described in the labelling (see section 2.2)

and/or in section 11.

Symptoms/effects after inhalation : Material is destructive to tissue of the mucuous membranes and upper respiratory tract. Cough,

shortness of breath, headache, nausea.

## **SECTION 12: Ecological information**

#### 12.1. Toxicity

No additional information available

#### 12.2. Persistence and degradability

#### 2-(Perfluorooctanesulfonamido)acetic acid (2806-24-8)

Persistence and degradability

Not readily biodegradable. May cause long-term adverse effects in the environment. PBT Persistent, Bioaccumulative and Toxic.

## 12.3. Bioaccumulative potential

#### 2-(Perfluorooctanesulfonamido)acetic acid (2806-24-8)

Bioaccumulative potential Perfluorinated alkanes (PFAs, "forever chemicals") are long lasting, widely used chemicals that break down slowly over time. The potential hazards of PFAs are under investigation and have not been established.

## 12.4. Mobility in soil

No additional information available

#### 12.5. Other adverse effects

No additional information available

## **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

Waste treatment methods

Sewage disposal recommendations

Product/Packaging disposal recommendations

Additional information

Ecology - waste materials

- : Remove to an authorized incinerator equipped with an afterburner and a flue gas scrubber.
- : See the EPA's Interim Guidance on PFAS Destruction and Disposal.
- : Dispose of contents/container in accordance with licensed collector's sorting instructions.
- : Recycle the material as far as possible.
- : This material is considered to be a "Forever chemical". Prevent any possible release to the environment. Do not discharge into drains. Take all necessary measures to prevent accidental discharge of products into drains and waterways due to the rupture of containers or transfer systems, or emergency response.

## **SECTION 14: Transport information**

## 14.1. UN number

DOT NA No : UN3261 UN-No. (TDG) : UN3261

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UN-No. (IMDG) : 3261 UN-No. (IATA) : 3261

## 14.2. UN proper shipping name

Proper Shipping Name (DOT) : Corrosive solid, acidic, organic, n.o.s.

Proper Shipping Name (TDG) : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. Proper Shipping Name (IMDG) : CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S.

Proper Shipping Name (IATA) : Corrosive solid, acidic, organic, n.o.s.

## 14.3. Transport hazard class(es)

#### **DOT**

Transport hazard class(es) (DOT) : 8
Hazard labels (DOT) : 8



#### **TDG**

Transport hazard class(es) (TDG) : 8
Hazard labels (TDG) : 8



#### IMDG

Transport hazard class(es) (IMDG) : 8
Hazard labels (IMDG) : 8



#### **IATA**

Transport hazard class(es) (IATA) : 8
Hazard labels (IATA) : 8



## 14.4. Packing group

Packing group (DOT) : II
Packing group (TDG) : II
Packing group (IMDG) : II
Packing group (IATA) : II

## 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

#### **DOT**

UN-No.(DOT) : UN3261

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DOT Special Provisions (49 CFR 172.102)

: IB8 - Authorized IBCs: Metal (11A, 11B, 11N, 21A, 21B, 21N, 31A, 31B and 31N); Rigid plastics (11H1, 11H2, 21H1, 21H2, 31H1 and 31H2); Composite (11HZ1, 11HZ2, 21HZ1, 21HZ2, 31HZ1 and 31HZ2); Fiberboard (11G); Wooden (11C, 11D and 11F); Flexible (13H1, 13H2, 13H3, 13H4, 13H5, 13L1, 13L2, 13L3, 13L4, 13M1 or 13M2).

IP2 - When IBCs other than metal or rigid plastics IBCs are used, they must be offered for transportation in a closed freight container or a closed transport vehicle.

IP4 - Flexible, fiberboard or wooden IBCs must be sift-proof and water-resistant or be fitted with a sift-proof and water-resistant liner.

T3 - 2.65 178.274(d)(2) Normal...... 178.275(d)(2)

TP33 - The portable tank instruction assigned for this substance applies for granular and powdered solids and for solids which are filled and discharged at temperatures above their melting point which are cooled and transported as a solid mass. Solid substances transported or offered for transport above their melting point are authorized for transportation in portable tanks conforming to the provisions of portable tank instruction T4 for solid substances of packing group III or T7 for solid substances of packing group II, unless a tank with more stringent requirements for minimum shell thickness, maximum allowable working pressure, pressure-relief devices or bottom outlets are assigned in which case the more stringent tank instruction and special provisions shall apply. Filling limits must be in accordance with portable tank special provision TP3. Solids meeting the definition of an elevated temperature material must be transported in accordance with the applicable requirements of this subchapter.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154

DOT Packaging Non Bulk (49 CFR 173.xxx) : 212

DOT Packaging Bulk (49 CFR 173.xxx) : 240

DOT Quantity Limitations Passenger aircraft/rail (49 : 15 kg

CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49

CFR 175.75)

**DOT Vessel Stowage Location** 

oo kg

: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

#### **TDG**

UN-No. (TDG) : UN326

TDG Special Provisions : 1

: 16 - 1) The technical name of the most dangerous substance related to the primary class must be shown, in parentheses, on the shipping document following the shipping name in accordance with clause 3.5(1)(c)(i)(A) of Part 3, Documentation. The technical name must also be shown, in parentheses, on a small means of containment or on a tag following the shipping name in accordance with subsections 4.11(2) and (3) of Part 4, Dangerous Goods Safety Marks.
2) subsection (1), the technical name for the following dangerous goods is not required to be shown on a shipping document or on a small means of containment when Canadian law for domestic transport or an international convention for international transport prohibits the disclosure of the technical: a) UN1544, ALKALOID SALTS, SOLID, N.O.S. or ALKALOIDS, SOLID, N.O.S; b) UN1851, MEDICINE, LIQUID, TOXIC, N.O.S; c) UN3140, ALKALOID SALTS, LIQUID, N.O.S. or ALKALOIDS, LIQUID, N.O.S; d) UN3248, MEDICINE, LIQUID, FLAMMABLE, TOXIC, N.O.S; or e) UN3249, MEDICINE, SOLID, TOXIC, N.O.S. An example in Canada is the "Food and Drugs Act".

Explosive Limit and Limited Quantity Index : 1 kg
Excepted quantities (TDG) : E2
Passenger Carrying Road Vehicle or Passenger : 15 kg

Emergency Response Guide (ERG) Number : 154

Carrying Railway Vehicle Index

**IMDG** 

Special provision (IMDG) : 274 Limited quantities (IMDG) : 1 kg Excepted quantities (IMDG) : E2

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Packing instructions (IMDG) : P002
IBC packing instructions (IMDG) : IBC08
IBC special provisions (IMDG) : B21, B4
Tank instructions (IMDG) : T3
Tank special provisions (IMDG) : TP33

EmS-No. (Fire) : F-A - FIRE SCHEDULE Alfa - GENERAL FIRE SCHEDULE

EmS-No. (Spillage) : S-B - SPILLAGE SCHEDULE Bravo - CORROSIVE SUBSTANCES

Stowage category (IMDG) : B

Segregation (IMDG) : SGG1, SG36, SG49

Properties and observations (IMDG) : Causes burns to skin, eyes and mucous membranes.

#### **IATA**

PCA Excepted quantities (IATA) : E2 PCA Limited quantities (IATA) : Y844 : 5kg PCA limited quantity max net quantity (IATA) : 859 PCA packing instructions (IATA) PCA max net quantity (IATA) : 15kg CAO packing instructions (IATA) : 863 CAO max net quantity (IATA) : 50kg : A3, A803 Special provision (IATA) ERG code (IATA) 8L

## 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

## **SECTION 15: Regulatory information**

#### 15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

2-(Perfluorooctanesulfonamido)acetic acid CAS-No. 2806-24-8 100%

### 15.2. International regulations

#### CANADA

No additional information available

#### **EU-Regulations**

No additional information available

#### **National regulations**

No additional information available

## 15.3. US State regulations

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

## **SECTION 16: Other information**

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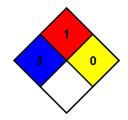
Full text of H-phrases		
H315	Causes skin irritation	
H318	Causes serious eye damage	
H335	May cause respiratory irritation	

NFPA health hazard : 3 - Materials that, under emergency conditions, can cause serious or permanent injury.

NFPA fire hazard : 1 - Materials that must be preheated before ignition can occur.

:  $\,$  0 - Material that in themselves are normally stable, even under fire

conditions



Hazard Rating

NFPA reactivity

Health

Flammability

Physical

Safety Data Sheet (SDS), USA

: 3 Serious Hazard - Major injury likely unless prompt action is taken and medical treatment is

: 1 Slight Hazard - Materials that must be preheated before ignition will occur. Includes liquids, solids and semi solids having a flash point above 200 F. (Class IIIB)

: 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.