

# **SAFETY DATA SHEET**

Version 6.2 Revision Date 05/04/2019 Print Date 09/29/2019

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifiers

Product name : Silthiofam

Product Number : 32498

Brand : Sigma-Aldrich CAS-No. : 175217-20-6

## 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Synthesis of substances

## 1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.

3050 Spruce Street ST. LOUIS MO 63103 UNITED STATES

Telephone : +1 314 771-5765 Fax : +1 800 325-5052

# 1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887

### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

# GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Short-term (acute) aquatic hazard (Category 3), H402 Long-term (chronic) aquatic hazard (Category 3), H412

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 GHS Label elements, including precautionary statements

Pictogram none
Signal word none

Hazard statement(s)

H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

P273 Avoid release to the environment.

P501 Dispose of contents/ container to an approved waste disposal

plant.

## 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

Sigma-Aldrich - 32498 Page 1 of 8



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

#### 3.1 Substances

Synonyms: 3-Thiophenecarboxamide, 4,5-dimethyl-N-2-propenyl-2-

(trimethylsilyl)-

N-Allyl-4,5-dimethyl-2-(trimethylsilyl)thiophene-3-carboxamide

Molecular weight : 267.46 g/mol CAS-No. : 175217-20-6

No components need to be disclosed according to the applicable regulations.

For the full text of the H-Statements mentioned in this Section, see Section 16.

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

# 4.1 Description of first aid measures

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

### In case of eye contact

Flush eyes with water as a precaution.

### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 4.2 Most important symptoms and effects, both acute and delayed

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

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

# Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

## 5.2 Special hazards arising from the substance or mixture

Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, silicon oxides

# **5.3** Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Millipore

#### 5.4 Further information

No data available

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

# 6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. For personal protection see section 8.

# 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

### 6.3 Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

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

## 7.1 Precautions for safe handling

Provide appropriate exhaust ventilation at places where dust is formed. For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

Store under inert gas. Keep in a dry place. Storage class (TRGS 510): 13: Non Combustible Solids

## 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

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

### 8.1 Control parameters

# **Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

# **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

### Personal protective equipment

#### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

# **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

# 9.1 Information on basic physical and chemical properties

a) Appearance Form: crystalline, powder

Colour: white

b) Odour odourless

c) Odour Threshold No data availabled) pH No data available

e) Melting 85 - 90 °C (185 - 194 °F)

point/freezing point

 f) Initial boiling point No data available and boiling range

g) Flash point ()No data availableh) Evaporation rate No data availablei) Flammability (solid, No data available

gas)

j) Upper/lower No data available flammability or

k) Vapour pressure No data availablel) Vapour density No data availablem) Relative density No data available

n) Water solubility 39.9 g/l at 20 °C (68 °F)

o) Partition coefficient: log Pow: 3.72 at 20 °C (68 °F)

n-octanol/water

explosive limits

p) Auto-ignition No data available

temperature

Sigma-Aldrich - 32498 Page 4 of 8



q) Decomposition No data available temperature

r) Viscosity No data availables) Explosive properties No data availablet) Oxidizing properties No data available

## 9.2 Other safety information

No data available

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

### 10.1 Reactivity

No data available

## 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

No data available

### 10.4 Conditions to avoid

No data available

### 10.5 Incompatible materials

Strong oxidizing agents

### 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Sulphur oxides, silicon oxides

Other decomposition products - No data available

In the event of fire: see section 5

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

### **Acute toxicity**

LD50 Oral - Rat - > 5,000 mg/kg LC50 Inhalation - Rat - > 2.8 mg/l LD50 Dermal - Rat - > 5,000 mg/kg No data available

# Skin corrosion/irritation

Skin - Rabbit

Result: No skin irritation

## Serious eye damage/eye irritation

Eyes - Rabbit

Result: No eye irritation

### Respiratory or skin sensitisation

- Guinea pig

Did not cause sensitisation on laboratory animals.

### **Germ cell mutagenicity**

Ames test

Sigma-Aldrich - 32498 Page 5 of 8



S. typhimurium

Result: Not mutagenic in Ames Test

Mouse

Result: negative Micronucleus test

# Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is

identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is

identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is

on OSHA's list of regulated carcinogens.

### Reproductive toxicity

No data available No data available

# Specific target organ toxicity - single exposure

No data available

# Specific target organ toxicity - repeated exposure

No data available

# **Aspiration hazard**

No data available

#### **Additional Information**

RTECS: Not available

## **SECTION 12: Ecological information**

# 12.1 Toxicity

Toxicity to fish LC50 - Lepomis macrochirus (Bluegill sunfish) - 11 mg/l - 96.0 h

LC50 - Oncorhynchus mykiss (rainbow trout) - 14 mg/l - 96.0 h

Toxicity to daphnia and other aquatic invertebrates

EC50 - Daphnia (water flea) - 14 mg/l - 48 h

Toxicity to algae EbC50 - Algae - 6.7 mg/l - 120 h

# 12.2 Persistence and degradability

According to the results of tests of biodegradability this product is not readily biodegradable.

# 12.3 Bioaccumulative potential

No data available

# 12.4 Mobility in soil

No data available

Sigma-Aldrich - 32498 Page 6 of 8

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

Harmful to aquatic life.

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

# **Contaminated packaging**

Dispose of as unused product.

# **SECTION 14: Transport information**

#### DOT (US)

Not dangerous goods

#### **IMDG**

Not dangerous goods

#### **IATA**

Not dangerous goods

## **SECTION 15: Regulatory information**

### **SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# SARA 311/312 Hazards

No SARA Hazards

# **Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

### **Pennsylvania Right To Know Components**

3-Thiophenecarboxamide, 4,5-dimethyl-N-2- CAS-No. Revision Date propenyl-2-(trimethylsilyl)- 175217-20-6

#### **New Jersey Right To Know Components**

3-Thiophenecarboxamide, 4,5-dimethyl-N-2- CAS-No. Revision Date

Sigma-Aldrich - 32498 Page 7 of 8

# California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

# **SECTION 16: Other information**

## **Further information**

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Version: 6.2 Revision Date: 05/04/2019 Print Date: 09/29/2019

Sigma-Aldrich - 32498 Page 8 of 8

