# SIGMA-ALDRICH

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SAFETY DATA SHEET

Version 6.0 Revision Date 05/26/2018 Print Date 11/11/2018

1. PF	RODUCT AND COMPANY ID	ENTIFICATION
1.1	Product identifiers Product name	<sup>:</sup> Flonicamid
	CAS-No.	: 158062-67-0
1.2	Relevant identified uses	f the substance or mixture and uses advised against
	Identified uses	: Laboratory chemicals, Synthesis of substances
1.3	Details of the supplier of	he safety data sheet
	Company	<ul> <li>Sigma-Aldrich Inc.</li> <li>3050 Spruce Street</li> <li>ST. LOUIS MO 63103</li> <li>UNITED STATES</li> </ul>
	Telephone Fax	: +1 314 771-5765 : +1 800 325-5052
1.4	Emergency telephone nu	nber
	Emergency Phone #	: (314) 776-6555

## 2. HAZARDS IDENTIFICATION

## 2.1 Classification of the substance or mixture

## GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Acute toxicity, Oral (Category 4), H302

Acute aquatic toxicity (Category 3), H402

Chronic aquatic toxicity (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



Signal word	Warning
Hazard statement(s) H302 H412	Harmful if swallowed. Harmful to aquatic life with long lasting effects.
Precautionary statement(s) P264 P270 P273	Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product Avoid release to the environment.

P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P330	Rinse mouth.
P501	Dispose of contents/ container to an approved waste disposal plant.

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

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### 3.1 Substances

Cubotanooo		
Molecular weight	:	229.16 g/mol
CAS-No.	:	158062-67-0

## Hazardous components

Component	Classification	Concentration
Flonicamid		
	Acute Tox. 4; Aquatic Acute 3; Aquatic Chronic 3; H302, H412	<= 100 %

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

## 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. Move out of dangerous area.

## 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

## 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), Hydrogen fluoride

## **5.3** Advice for firefighters Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information No data available

## 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

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.

## 7. HANDLING AND STORAGE

## 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.Normal measures for preventive fire protection. 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. 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

## 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

Safety glasses with side-shields conforming to EN166 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**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator.For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

## 9.1 Information on basic physical and chemical properties

a)	Appearance	Form: crystalline Colour: white
b)	Odour	characteristic
c)	Odour Threshold	No data available
d)	рН	No data available
e)	Melting point/freezing point	156 - 160 °C (313 - 320 °F)
f)	Initial boiling point and boiling range	No data available
g)	Flash point	No data available
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Upper/lower flammability or explosive limits	No data available
k)	Vapour pressure	No data available
I)	Vapour density	No data available
m)	Relative density	1.531 g/cm3 at 20 °C (68 °F)
n)	Water solubility	5.2 g/l at 20 °C (68 °F)
o)	Partition coefficient: n- octanol/water	log Pow: 0.3
p)	Auto-ignition temperature	No data available
q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available
Oth	ner safety information	
	Dissociation constant	11.6

## **10. STABILITY AND REACTIVITY**

## 10.1 Reactivity No data available

9.2

**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 No data available

## 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx), Hydrogen fluoride Other decomposition products - No data available

In the event of fire: see section 5

## **11. TOXICOLOGICAL INFORMATION**

## 11.1 Information on toxicological effects

## Acute toxicity

LD50 Oral - Rat - male - 884 mg/kg LD50 Oral - Rat - female - 1,768 mg/kg 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** No data available

#### Germ cell mutagenicity Ames test

Result: Not mutagenic in Ames 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

## **12. ECOLOGICAL INFORMATION**

## 12.1 Toxicity

Toxicity to fish	LC50 - Oncorhynchus mykiss (rainbow trout) - > 91.9 mg/l - 96 h(Flonicamid)
Toxicity to daphnia and	EC50 - Daphnia (water flea) - > 100 mg/l - 48 h(Flonicamid)

other aquatic invertebrates

- **12.2 Persistence and degradability** No data available
- **12.3 Bioaccumulative potential** No data available
- **12.4 Mobility in soil** No data available(Flonicamid)
- **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.

No data available

## **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.

## **14. TRANSPORT INFORMATION**

DOT (US) Not dangerous goods IMDG Not dangerous goods

IATA Not dangerous goods

## **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 Acute Health Hazard

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

## Pennsylvania Right To Know Components

Flonicamid	CAS-No. 158062-67-0	Revision Date
New Jersey Right To Know Components	CAS-No.	Revision Date
Flonicamid	158062-67-0	
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.

## **16. OTHER INFORMATION**

## Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H402	Harmful to aquatic life.
H412	Harmful to aquatic life with long lasting effects.

## **HMIS Rating**

Health hazard:	1
Chronic Health Hazard: Flammability: Physical Hazard	0 0
NFPA Rating	
NFPA Rating Health hazard:	0
•	0 0

#### **Further information**

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## **Preparation Information**

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