

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Catalogue No.: OFS0001
Product name: Capsaicin
Purity: > 96%
Molecular Weight: 305.41
Formula: C₁₈H₂₇NO₃ (Hill)
EC-No.: 206-969-8
CAS-No.: 404 - 86 - 4

REACH Registration Number: A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

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

Identified uses Reagent for development and research.

1.3 Details of the supplier of the safety data sheet

Company address: Organofuel Sweden AB, Storgatan 73F, 852 30 Sundsvall, Sweden
Company e-mail: info@organofuelsweden.com
Company telephone number: +46 72 250 04 15

SECTION 2. Hazards identification

2.1 Classification of the substance or mixture Classification

H-Classification
Skin irritation, Category 2, H315
Eye irritation, Category 2, H319
Specific target organ toxicity - single exposure, Category 3, H335

R-Classification
Xi, Irritant; R36/37/38

2.2 Label elements

Labelling Hazard pictograms



Signal word: danger

Hazard statements

H301 Toxic if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.

H334 May cause allergy or asthma symptoms.

H335 May cause respiratory irritation.

Precautionary statements

P261 Avoid breathing dust.

P280 Wear protective gloves.

P301 + P310 If swallowed: Immediately call a poison center/doctor.

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

P304 + P340 If inhaled: Remove victim to fresh air and keep at rest in a position 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.

P342 + P311 If experiencing respiratory symptoms: Call a poison center/doctor.

2.3 Other hazards

None known.

SECTION 3. First aid measures

3.1 Description of first aid measures

After inhalation: fresh air.

In case of skin contact: Take off immediately all contaminated clothing.

Rinse skin with water/ shower.

After eye contact: rinse out with plenty of water. Call in ophthalmologist.

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

3.2 Most important symptoms and effects, both acute and delayed

Irritant effects, cough, shortness of breath.

SECTION 4. Firefighting measures

4.1 Extinguishing media

Suitable extinguishing media

Water, Foam, Carbon dioxide (CO₂), Dry powder.

Unsuitable extinguishing media

For this substance/mixture no limitations of extinguishing agents are given.

4.2 Special hazards arising from the substance or mixture

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

Fire may cause evolution of nitrous gases.

4.3 Advice for firefighters

Special protective equipment for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 5. Accidental release measures

5.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact.

Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

5.2 Environmental precautions

Do not let product enter drains.

5.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions.

Take up dry. Dispose of properly. Clean up affected area.

Avoid generation of dusts.

SECTION 6. Handling and storage

6.1 Precautions for safe handling

Advice on safe handling: Observe label precautions.

Hygiene measures: Immediately change contaminated clothing. Apply preventive skin protection.

Wash hands and face after working with substance.

6.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Tightly closed. Dry.

Recommended storage temperature: 2-8°C.

SECTION 7. Exposure controls/personal protection

7.1 Control parameters

None.

7.2 Exposure controls

Engineering measures: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

Individual protection measures: Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

Eye/face protection: Safety glasses

Hand protection:

Full contact:

Glove material: Nitrile rubber

Glove thickness: 0,11 mm

Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.

Other protective equipment: protective clothing.

Respiratory protection: required when dusts are generated.

Recommended Filter type: Filter P 3 (acc. to DIN 3181) for solid and liquid particles of toxic and very toxic substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

SECTION 8. Physical and chemical properties

8.1 Information on basic physical and chemical properties

Form: solid

Odour: odourless

Odour Threshold: not applicable.

Melting point: 62 - 65 deg. Celsius

Boiling point/boiling range: 210 - 220 deg. Celsius, at 0,013 hPa

Water solubility: at 20 deg. Celsius insoluble

Partition coefficient: n- octanol/water: log Pow: 4,00 (calculated)

A remarkable bioaccumulation potential is expected (log Po/w >3). (External MSDS)

Explosive properties: not classified as explosive.

Oxidizing properties: none

SECTION 9. Stability and reactivity**9.1 Reactivity**

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

9.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

9.3 Possibility of hazardous reactions

Violent reactions possible with: Strong oxidizing agents.

SECTION 10. Toxicological information**10.1 Information on toxicological effects**

Acute oral toxicity: Symptoms: Irritations of mucous membranes in the mouth, pharynx, oesophagus and gastrointestinal tract.

Acute inhalation toxicity: Symptoms: Cough, Shortness of breath, mucosal irritations.

Symptoms: Possible damages: damage of respiratory tract.

Acute dermal toxicity: This information is not available.

Skin irritation: Causes skin irritation.

Eye irritation: Causes serious eye irritation.

Sensitisation: This information is not available.

Germ cell mutagenicity: This information is not available.

Carcinogenicity: This information is not available.

Reproductive toxicity: This information is not available.

Teratogenicity: This information is not available.

Specific target organ toxicity - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure This information is not available.

Aspiration hazard: This information is not available.

10.2 Further information

Quantitative data on the toxicity of this product are not available. Therapeutically used substance.

Other dangerous properties cannot be excluded.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 11. Ecological information**11.1 Bioaccumulative potential**

Partition coefficient: n-octanol/water

log Pow: 4,00 (calculated)

A remarkable bioaccumulation potential is expected (log Po/w >3). (External MSDS)

11.2 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

11.3 Other adverse effects

Additional ecological information

We have no quantitative data concerning the ecological effects of this product.

Discharge into the environment must be avoided.

SECTION 12. Disposal considerations

Waste treatment methods: See www.retrologistik.com for processes regarding the return of chemicals and containers or contact us there if you have further questions.

SECTION 13. Transport information

Land transport (ADR/RID)

13.1 UN number: UN2811

13.2 Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Capsaicin)

13.3 Class: 6.1

13.4 Packing group: III

13.5 Environmentally hazardous: -

13.6 Special precautions for user: yes

Tunnel restriction code: D/E

Inland waterway transport (ADN)

Not relevant.

Air transport (IATA)

13.1 UN number: UN2811

13.2 Proper shipping name: Toxic solid, organic, n.o.s. (Capsaicin)

13.3 Class: 6.1

13.4 Packing group: III

13.5 Environmentally hazardous: -

13.6 Special precautions for user: yes

Sea transport (IMDG)

13.1 UN number: UN2811

13.2 Proper shipping name: TOXIC SOLID, ORGANIC, N.O.S. (Capsaicin)

13.3 Class: 6.1

13.4 Packing group: III

13.5 Environmentally hazardous: -

13.6 Special precautions for user: yes

EMS: F-AS-A

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

Not relevant.

SECTION 14. Regulatory information

14.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Major Accident Hazard: 96/82/EC.

Legislation: Directive 96/82/EC does not apply.

Occupational restrictions: Take note of Dir 94/33/EC on the protection of young people at work.

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: not regulated.

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EEC: not regulated.

Regulation (EC) No 689/2008 concerning the export and import of dangerous chemicals: not regulated.

Substances of very high concern (SVHC): This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of $\geq 0.1\%$ (w/w).

National legislation Storage class: 10 – 13.