

## capsaicin 404-86-4 MSDS

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

#### Product identifiers

Product name : Capsaicin

REACH No. : A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

CAS-No. : 404-86-4

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

Identified uses : Laboratory chemicals, Manufacture of substances

### SECTION 2: Hazards identification

#### Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008

Acute toxicity, Oral (Category 3), H301

Skin irritation (Category 2), H315

Eye irritation (Category 2), H319

Respiratory sensitisation (Category 1), H334

Skin sensitisation (Category 1), H317

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

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

##### Classification according to EU Directives 67/548/EEC or 1999/45/EC

T Toxic R25, R36/37/38, R42/43

For the full text of the R-phrases mentioned in this Section, see Section 16.

#### Label elements

##### Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Danger

Hazard statement(s)

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 or breathing difficulties if inhaled.

H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust.

P280 Wear protective gloves.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

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 or doctor/  
physician.  
Supplemental Hazard none  
Statements  
**Other hazards**  
Lachrymator.  
Lachrymator., Sternutator.

### SECTION 3: Composition/information on ingredients

#### Substances

Synonyms : 8-Methyl-N-vanillyl-trans-6-nonenamide  
Formula : C18H27NO3  
Molecular Weight : 305,41 g/mol  
CAS-No. : 404-86-4  
EC-No. : 206-969-8

#### Hazardous ingredients according to Regulation (EC) No 1272/2008

Component	Classification	Concentration
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#### Capsaicin

CAS-No.	404-86-4	Acute Tox. 3; Skin Irrit. 2; Eye	<= 100 %
EC-No.	206-969-8	Irrit. 2; Resp. Sens. 1; Skin	
		Sens. 1; STOT SE 3; H301, H315, H317, H319, H334, H335	

#### Hazardous ingredients according to Directive 1999/45/EC

Component	Classification	Concentration
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#### Capsaicin

CAS-No.	404-86-4	T, R25 - R36/37/38 - R42/43	<= 100 %
EC-No.	206-969-8		

For the full text of the H-Statements and R-Phrases mentioned in this Section, see Section 16

### SECTION 4: First aid measures

#### 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. Take victim immediately to hospital. Consult a physician.

##### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**If swallowed**

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

**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

**Indication of any immediate medical attention and special treatment needed**

no data available

**SECTION 5: Firefighting measures****Extinguishing media****Suitable extinguishing media**

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

**Special hazards arising from the substance or mixture**

Carbon oxides, nitrogen oxides (NO<sub>x</sub>)

**Advice for firefighters**

Wear self contained breathing apparatus for fire fighting if necessary.

**Further information**

no data available

**SECTION 6: Accidental release measures****Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

For personal protection see section 8.

**Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

**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.

**Reference to other sections**

For disposal see section 13.

**SECTION 7: Handling and storage****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.

For precautions see section 2.2.

**Conditions for safe storage, including any incompatibilities**

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

Recommended storage temperature: 2 - 8 °C

**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**

### **Control parameters**

#### **Components with workplace control parameters**

#### **Exposure controls**

##### **Appropriate engineering controls**

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling

the product.

##### **Personal protective equipment**

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

Face shield and safety glasses 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Z677272, Size M)

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested: Dermatril® (KCL 740 / Z677272, Size M)

data source: KCL GmbH, D-36124 Eichenzell, phone +49 (0)6659 87300, test method: EN374

If used in solution, or mixed with other substances, and under conditions which differ from EN 374,

contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

###### **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**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N99 (US) or type P2 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

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.

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

#### **Information on basic physical and chemical properties**

- a) Appearance      Form: crystalline  
Colour: white
- b) Odour      no data available
- c) Odour Threshold      no data available
- d) pH      no data available
- e) Melting point/freezing      Melting point/range: 62 - 65 °C  
point      Melting point/range: 62 - 65 °C
- f) Initial boiling point and no data available  
boiling range
- g) Flash point      113 °C - closed cup
- h) Evaporation rate      no data available
- i) Flammability (solid, gas) no data available
- j) Upper/lower      no data available  
flammability or  
explosive limits
- k) Vapour pressure      no data available
- l) Vapour density      no data available
- m) Relative density      no data available
- n) Water solubility      insoluble
- o) Partition coefficient: n- no data available  
octanol/water
- p) Auto-ignition      no data available  
temperature
- q) Decomposition      no data available  
temperature
- r) Viscosity      no data available
- s) Explosive properties      no data available
- t) Oxidizing properties      no data available

#### **Other safety information**

Solubility in other      Benzene - soluble  
solvents      Ether - soluble  
Chloroform - soluble

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

#### **Reactivity**

no data available

#### **Chemical stability**

Stable under recommended storage conditions.

**Possibility of hazardous reactions**

no data available

**Conditions to avoid**

no data available

**Incompatible materials**

Strong oxidizing agents

**Hazardous decomposition products**

Other decomposition products - no data available

In the event of fire: see section 5

**SECTION 11: Toxicological information**

**Information on toxicological effects**

**Acute toxicity**

LD50 Oral - rat - male - 161,2 mg/kg

LD50 Oral - rat - female - 148,1 mg/kg

LD50 Dermal - mouse - > 512 mg/kg

**Skin corrosion/irritation**

no data available

**Serious eye damage/eye irritation**

Eyes - guinea pig

Result: Mild eye irritation

**Respiratory or skin sensitisation**

no data available

**Germ cell mutagenicity**

no data available

**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.

**Reproductive toxicity**

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: RA8530000

burning sensation, Cough, sneezing, wheezing, laryngitis, Shortness of breath, Headache, Nausea,

Vomiting, To the best of our knowledge, the chemical, physical, and toxicological properties have not been

thoroughly investigated.

Liver - Irregularities - Based on Human Evidence

## **SECTION 12: Ecological information**

### **Toxicity**

no data available

### **Persistence and degradability**

no data available

### **Bioaccumulative potential**

no data available

### **Mobility in soil**

no data available

### **Results of PBT and vPvB assessment**

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

### **Other adverse effects**

no data available

## **SECTION 13: Disposal considerations**

### **Waste treatment methods**

#### **Product**

Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with

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

#### **Contaminated packaging**

Dispose of as unused product.

## **SECTION 14: Transport information**

### **UN number**

ADR/RID: 2811    IMDG: 2811    IATA: 2811

### **UN proper shipping name**

ADR/RID: TOXIC SOLID, ORGANIC, N.O.S. (Capsaicin)

IMDG: TOXIC SOLID, ORGANIC, N.O.S. (Capsaicin)

IATA: Toxic solid, organic, n.o.s. (Capsaicin)

### **Transport hazard class(es)**

ADR/RID: 6.1    IMDG: 6.1    IATA: 6.1

### **Packaging group**

ADR/RID: III    IMDG: III    IATA: III

### **Environmental hazards**

ADR/RID: no    IMDG Marine pollutant: no    IATA: no

### **Special precautions for user**

no data available

**SECTION 15 - REGULATORY INFORMATION**

N/A

**SECTION 16 - ADDITIONAL INFORMATION**

N/A