



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Chili CO2-to extract

Page 2 of 8



#### Hazard statements

- H317 May cause an allergic skin reaction.  
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### Precautionary statements

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.  
 P302+P352 IF ON SKIN: Wash with plenty of water.  
 P333+P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.

#### 2.3. Other hazards

Special skid risk by leaking/spilling product.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

INCI-Name (CTFA): Capsicum Frutescens (Chili) Fruit Extract, CAS-no. 85940-30-3, EC-no. (EINECS/ELINCS): 288-920-0  
 and Brassica Campestris (Rapeseed) Seed Oil, CAS-no. 8002-13-9, EC-no. (EINECS/ELINCS): 232-299-0

contains 3,0 - 3,2 % total capsaicinoids containing capsaicin, dihydrocapsaicin, nordihydrocapsaicin

##### Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
288-920-0	Capsicum frutescens, ext.	40 %
85940-30-3	Xn - Harmful R22-42/43	
	Resp. Sens. 1, Skin Sens. 1; H334 H317	

Full text of R-, H- and EUH-phrases: see section 16.

##### Further Information

no solvent residues

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).  
 Seek medical attention if problems persist.

##### After inhalation

Provide fresh air.

##### After contact with skin

After contact with skin, wash immediately with: Water and soap.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Chili CO<sub>2</sub>-to extract

Page 3 of 8

Seek medical attention if problems persist.

#### **After contact with eyes**

In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Consult an ophthalmologist.

#### **After ingestion**

Rinse mouth immediately and drink large quantities of water. Consult physician.

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

no data available

#### **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**

foam, CO<sub>2</sub>, powder

##### **Unsuitable extinguishing media**

water stream

#### **5.2. Special hazards arising from the substance or mixture**

formation of dangerous fumes possible

#### **5.3. Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus.

### SECTION 6: Accidental release measures

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

Avoid contact with skin and eyes, concentrated extracts should not be swallowed.

Wear personal protection equipment.

Provide adequate ventilation.

Wear respiratory protection when in the presence of vapour, dust, and aerosols.

#### **6.2. Environmental precautions**

keep away from canalisation, waterway, groundwater

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

suck up with oil binding media. Remove mechanically, placing in appropriate containers for disposal.

### SECTION 7: Handling and storage

#### **7.1. Precautions for safe handling**

##### **Advice on safe handling**

Avoid contact with skin and eyes, concentrated extracts should not be swallowed.

wear splash goggles and oilresistent gloves

Do not breathe gas/fumes/vapour/spray.

##### **Advice on protection against fire and explosion**

Keep away from sources of ignition - No smoking.

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

##### **Requirements for storage rooms and vessels**

no special measures necessary

##### **Further information on storage conditions**

keep dark and dry, avoid heat

store in tightly closed container



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Chili CO<sub>2</sub>-to extract

Page 4 of 8

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

##### 8.1. Control parameters

##### 8.2. Exposure controls

###### Protective and hygiene measures

remove contaminated clothes

###### Eye/face protection

wear splash goggles

###### Hand protection

When handling chemical substances, chemical protective gloves must be worn with CE label including a four digit code. German Industry Norms (DIN) / European Norms (EN): EN 374

###### Skin protection

wear clothing as usual in chemical industry, remove contaminated clothes. After contact with skin, wash immediately with: Water and soap.

###### Respiratory protection

do not breathe vapour / aerosol

Respiratory protection required in case of: aerosol or mist generation.

Filter respirator with filter or ventilator type: A

#### SECTION 9: Physical and chemical properties

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

Physical state: clear oil  
Colour: dark red  
Odour: hot, characteristic

##### Test method

pH-Value: no data available

###### Changes in the physical state

Melting point: no data available

Initial boiling point and boiling range: no data available

Sublimation point: no data available

Softening point: no data available

Pour point: no data available

Flash point: > 100 °C closed cup

###### Flammability

Solid: no data available

Gas: no data available

###### Explosive properties

no data available

Lower explosion limits: no data available

Upper explosion limits: no data available

Ignition temperature: no data available

###### Auto-ignition temperature

Solid: no data available

Gas: no data available

Decomposition temperature: no data available



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Chili CO<sub>2</sub>-to extract

Page 5 of 8

#### **Oxidizing properties**

no data available

Vapour pressure:

no data available

Density (at 20 °C):

< 1,00 g/cm<sup>3</sup> pycnometer

Bulk density:

no data available

Water solubility:

insoluble

#### **Solubility in other solvents**

good soluble in fat phases

Partition coefficient:

no data available

Viscosity / dynamic:

no data available

Viscosity / kinematic:

no data available

Flow time:

no data available

Vapour density:

no data available

Evaporation rate:

no data available

Solvent separation test:

no data available

Solvent content:

no solvent residues

#### **9.2. Other information**

Solid content:

no data available

no data available

### SECTION 10: Stability and reactivity

#### **10.1. Reactivity**

no data available

#### **10.2. Chemical stability**

no data available

#### **10.3. Possibility of hazardous reactions**

no data available

#### **10.4. Conditions to avoid**

heat, open flame, sun light

#### **10.5. Incompatible materials**

Oxidizing agents.

#### **10.6. Hazardous decomposition products**

none - when carefully used

#### **Further information**

no decomposition in the application field

### SECTION 11: Toxicological information

#### **11.1. Information on toxicological effects**

##### **Toxicokinetics, metabolism and distribution**

According to our knowledge, the chemical, physical and toxicological properties have not been examined extensively.

##### **Irritation and corrosivity**

Irritating to eyes, respiratory system and skin, strong irritant effect

##### **Sensitising effects**

no data available



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Chili CO2-to extract

Page 6 of 8

#### Severe effects after repeated or prolonged exposure

no data available

#### Carcinogenic/mutagenic/toxic effects for reproduction

no data available

#### Specific effects in experiment on an animal

no data available

#### Further information

Acute toxicity, irritation of the skin and mucous membrane, and mutagenic potential of the preparation assessed by the manufacturer on the basis of the data sheets available on the main components. Information gaps exist on some of the main individual components. However, according to the experience of the manufacturer, no dangers above and beyond those on the product label are to be expected.

### SECTION 12: Ecological information

#### 12.1. Toxicity

No data for ecological evaluation on hand

Under appropriate use there are no ecological problems to expect

#### 12.2. Persistence and degradability

no data available

#### 12.3. Bioaccumulative potential

no data available

#### 12.4. Mobility in soil

no data available

#### 12.5. Results of PBT and vPvB assessment

no data available

#### 12.6. Other adverse effects

no data available

#### Further information

no heavy metals and inorganic components

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### Advice on disposal

in accordance with valid regulations

##### Waste disposal number of waste from residues/unused products

160305 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; off-specification batches and unused products; organic wastes containing dangerous substances  
Classified as hazardous waste.

##### Contaminated packaging

in accordance with valid regulations

### SECTION 14: Transport information

#### Land transport (ADR/RID)

##### 14.1. UN number:

No dangerous good in sense of this transport regulation.

##### 14.2. UN proper shipping name:

No dangerous good in sense of this transport regulation.

##### 14.3. Transport hazard class(es):

No dangerous good in sense of this transport regulation.

##### 14.4. Packing group:

No dangerous good in sense of this transport regulation.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Chili CO2-to extract

Page 7 of 8

#### Inland waterways transport (ADN)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### Marine transport (IMDG)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### Air transport (ICAO)

- 14.1. UN number:** No dangerous good in sense of this transport regulation.  
**14.2. UN proper shipping name:** No dangerous good in sense of this transport regulation.  
**14.3. Transport hazard class(es):** No dangerous good in sense of this transport regulation.  
**14.4. Packing group:** No dangerous good in sense of this transport regulation.

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

#### 14.6. Special precautions for user

no data available

#### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

no data available

#### Other applicable information

no dangerous good in the sense of the transport regulations

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### National regulatory information

- Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.  
Water contaminating class (D): 2 - water contaminating

### SECTION 16: Other information

#### Changes

Reason for revision: general revision of whole document

#### Relevant R-phrases (Number and full text)

- 22 Harmful if swallowed.  
42/43 May cause sensitisation by inhalation and skin contact.

#### Relevant H- and EUH-phrases (Number and full text)

- H317 May cause an allergic skin reaction.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

#### Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.  
The receiver of our product is singularly responsible for adhering to existing laws and regulations.



## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Chili CO2-to extract

Page 8 of 8

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*



## Chili CO<sub>2</sub>-to extract (organic) 3,1 % Capsaicinoids, DE-ÖKO-013



Raw material: *Capsicum frutescens* - Fruit with seeds, dried, from organic farming

Production: By supercritical fluid extraction with natural carbon dioxide, no solvent residues, no inorganic salts, no heavy metals, no reproducible microorganisms [1]. The extract is standardized by addition of rapeseed oil (organic).

Description: Contains all CO<sub>2</sub>-soluble lipophilic components. Red, at room temperature clear liquid oil with pungent smell and taste.

D/E - ratio: 3,5 - 5,0 kg raw material yield 1 kg product.

Declaration: INCI-Name (CTFA): Capsicum Frutescens (Chili) Fruit Extract, CAS-No. 85940-30-3, EINECS-No. 288-920-0 and Brassica Campestris (Rapeseed) Seed Oil, CAS-No. 8002-13-9, EINECS-No. 232-299-0

Halal - Status: Certified by Halal Certification Services (HCS)  
The certification is marked with the Halal Logo on the product.

Kosher - Status: Certified by London Beth Din Kashrut Division (KLBD)  
The certification is marked with the Kosher logo on the product.

Transport: No dangerous good in the sense of the transport regulations.

Ingredients: 3,0 - 3,2 % total capsaicinoids (containing nordihydrocapsaicin, capsaicin, dihydrocapsaicin), NMT 0,1 % carotenoids (beta-carotene, capsanthin, capsorubin), fatty oil.

Application: In food industry, in cosmetics and pharmaceutical preparations.

Naturalness: The product is 100 % natural and contains apart from the rapeseed oil (organic) no additives and no other technical adjuncts. It corresponds to the EC Flavouring Regulation No. 1334/2008 for flavouring preparations.

Stability: Unopened container under cool and dry storage conditions and exclusion of light at least 5 years.

References: [1] Manninen P., Häivälä E., Sarimo S., Kallio H. : Z. Lebens Unters Forsch A (1997) 204: 202-205

Disclaimer: These data are given for customer's information only to the best of our knowledge but under exemption of liability especially regarding infringement of or prejudice to third party rights through the use of this product. Users are responsible for ensuring the compliance with the applicable legislation.

The concentrated NKK extracts are raw materials for product formulation. Hence they are not intended for direct consumption in food and for undiluted topical application in cosmetics, perfumery and aromatherapy. Keep away from children.



# CO<sub>2</sub> EXTRACTION

06.11.2015