

Safety data sheet according to 1907/2006/EC, Article 31

Printing date: 24.10.2016

Version: 3.00

Revision: 24.10.2016

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

- **1.1 Product identifier**
- **Trade name: Tetra-Iso-Extract (Tetra)**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against: -**
- **Application of the substance / the preparation:** Manufacturing of food
- **Uses advised against -**
- **1.3 Details of the supplier of the safety data sheet**
- **Supplier/Manufacturer:**
Simon H. Steiner
Hopfen GmbH
Auhofstr. 18
84048 Mainburg
Germany
- Tel.: +49-8751-8605-0
· Fax: +49-8751-8605-80
- **Email competent person:** sds@kft.de
- **Information department:** See supplier/manufacturer
- **1.4 Emergency telephone number:**
Simon H. Steiner, Hopfen, GmbH, Mainburg, Germany
Tel.: +49-8751-8605-0 (Monday – Friday 08:00 – 17:00)

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008** The product is not classified according to the CLP regulation.
- **Information concerning particular hazards for human and environment:**
No hazards to be particularly mentioned. Please note the information of this Material Safety Data Sheet.
- **Additional information:**
For this substance/mixture no safety data sheet needs to be generated according to Article 31(1) of Regulation (EC) No 1907/2006. The here presented safety data sheet may therefore not fulfil all requirements of Annex II of this regulation.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable
- **vPvB:** Not applicable

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:**
Mixture
Aqueous solution of the tetrahydro-iso-alpha acid potassium salts produced from CO2-hop extract
- **Dangerous components:** Void
- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

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SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** If symptoms persist or in case of doubt, seek medical advice.
- **After inhalation:** Supply fresh air; consult a doctor in case of pain.
- **After skin contact:**
Wash with water and soap.
If symptoms persist, consult a doctor.
- **After eye contact:**
Rinse opened eye for several minutes under running water.
If symptoms persist, consult a doctor.
- **After swallowing:**
Rinse mouth with water.
Never give anything by mouth to an unconscious person.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed** Symptomatic treatment

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire fighting measures that suit the environment.
- **For safety reasons unsuitable extinguishing agents:** No data available
- **5.2 Special hazards arising from the substance or mixture**
In case of fire, the following can be released:
Carbon monoxide (CO)
Carbon dioxide (CO₂)
- **5.3 Advice for firefighters**
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information:**
Heating leads to increased pressure and danger of bursting and explosion. Immediately cool neighbouring packages and containers with sprayed water and, if possible, remove them out of the danger zone.
Collect contaminated fire fighting water separately. It must not enter the sewage system.
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Ensure adequate ventilation.
Avoid contact with eyes and skin.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Do not allow to penetrate the ground/soil.
- **6.3 Methods and material for containment and cleaning up:**
Dam up larger quantities and pump into containers.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Small quantities:
If spilled/leaked: absorb main quantity with cloth.
Make sure to recycle or dispose of in suitable receptacles.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Keep the working area dry and clean.
Avoid contact with eyes and skin.
- **Information about protection against explosions and fires:** Observe the general rules of industrial fire protection.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store container tightly sealed at a cool and dry place with sufficient ventilation.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Protect from exposure to light.
Protect from heat.
Protect from frost.
Prevent from drying out.
storage temperature: 5 - 15 °C
- **Storage class:** 10-13 other combustible and non-combustible substances
- **7.3 Specific end use(s)** No further relevant information available

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see section 7.
- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures should be adhered to when handling chemicals.
Avoid contact with eyes and skin.
Wash hands before breaks and at the end of work.
After skin contact, cleanse skin thoroughly.
- **Breathing equipment:** Not necessary if room is well-ventilated
- **Protection of hands:**
Chemical resistant gloves (EN 374)
The glove material has to be impermeable and resistant to the product/substance/preparation.
Selection of the glove material in consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves:**
Rubber
The choice is based on practical experience. The exact break-through time is unknown.
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- **Penetration time of glove material:**
The exact penetration time has to be found out by the manufacturer of the protective gloves and has to be observed.
- **Eye protection:** Safety glasses with side shields
- **Body protection:** Protective work clothing

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SECTION 9: Physical and chemical properties

<ul style="list-style-type: none"> · 9.1 Information on basic physical and chemical properties · General Information: · Appearance: <ul style="list-style-type: none"> Form: Liquid Colour: Yellow Amber coloured Clear · Odour: Characteristic · Odour threshold: Not determined 	
· pH-value:	8.5-10.5
· Change in condition:	
Melting point/Melting range:	Not determined
Boiling point/Boiling range:	Not determined
· Flash point:	> 97 °C
· Flammability (solid, gaseous):	Not applicable
· Ignition temperature:	Not determined
· Decomposition temperature:	Not determined
· Self ignition temperature:	Product is not self-igniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Explosion limits:	
Lower:	Not determined
Upper:	Not determined
· Oxidizing properties:	Not determined
· Vapour pressure:	Not determined
· Density at 20 °C:	1.017 ± 0.005 g/ml
· Relative density:	Not determined
· Vapour density:	Not determined
· Evaporation rate:	Not determined
· Solubility in / Miscibility with	
Water:	Miscible precipitate if acidified
· Partition coefficient (n-octanol/water):	Not determined
· Viscosity:	
dynamic:	Not determined
kinematic:	Not determined
· 9.2 Other information	Miscible with alcohol

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:**
To avoid thermal decomposition do not overheat.
No decomposition if used and stored according to specifications
Decomposition if product dries up: Keep product moist.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known

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- **10.4 Conditions to avoid**
 - Heat
 - sun rays
- **10.5 Incompatible materials:** Acids
- **10.6 Hazardous decomposition products:**
 - No hazardous decomposition products if instructions for storage and handling are followed

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **LD/LC50 values that are relevant for classification:** No toxicity data are available for the product itself.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Prolonged exposition may cause skin irritation.
- **Serious eye damage/irritation** May cause irritation to the eyes.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction):**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** Presently there are no ecotoxicological values available.
- **12.2 Persistence and degradability** No further relevant information available
- **12.3 Bioaccumulative potential** No further relevant information available
- **12.4 Mobility in soil** No further relevant information available
- **Additional ecological information:**
- **General notes:**
 - Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous to water
 - According to appendix 4 of VwVwS dated 17.05.1999 (German regulation)
 - Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable
- **vPvB:** Not applicable
- **12.6 Other adverse effects** No further relevant information available

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation:**
 - Must be recycled or disposed of according to the regulations. Waste has to be classified according to the European Waste Catalogue based on the identification of the waste generating source.
 - Disposal according to instructions of local authorities
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

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SECTION 14: Transport information

· 14.1 UN-Number · ADR, ADN, IMDG, IATA	Void
· 14.2 UN proper shipping name · ADR, ADN, IMDG, IATA	Void
· 14.3 Transport hazard class(es) · ADR, ADN, IMDG, IATA · Class	Void
· 14.4 Packing group · ADR, IMDG, IATA	Void
· 14.5 Environmental hazards:	Not applicable
· 14.6 Special precautions for user	Not applicable
· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code	Not applicable
· Transport/Additional information:	Not dangerous according to the above regulations
· UN "Model Regulation":	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- Directive 2012/18/EU
- Named dangerous substances - ANNEX I None of the ingredients is listed.
- National regulations
- **Water hazard class:**
Water hazard class 1 (Self-assessment): slightly hazardous for water
According to appendix 4 of VwVwS dated 17.05.1999 (German regulation)
- **Further information:**
For this substance/mixture no safety data sheet needs to be generated according to Article 31(1) of Regulation (EC) No 1907/2006. The here presented safety data sheet may therefore not fulfil all requirements of Annex II of this regulation.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Replaces version dated:** Version/s 1.00 - 2.00 is/are not available in this language.

- **Department issuing SDS:**
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- **Contact:** Dr. Daniel Ries

- **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

MAL-Code: Måleteknisk Arbejdshygiejnisk Luftbehov (Regulation for the labeling concerning inhalation hazards, Denmark)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

• **Sources:**

Information provided by the manufacturer

ECHA - European Chemicals Agency

• *** Data compared to the previous version altered.**

Changes have been made to sections marked with a *, as compared to the previous version.

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