

## Safety Data Sheet

Per OSHA Instruction CPL 2-2.039 (1986)

**Trade Name: Beta Bio 10 - 45%**

Printing date: 19/06/2013

Revision: 07.07.2011

### 1 Product and Supplier Information

**Product details:****Trade name: Beta Bio 10 - 45%****Application of the substance / the preparation:** Food additive**Supplier/Manufacturer:**S. S. Steiner, Inc.  
1 W Washington Avenue  
Yakima, WA 98903  
USA

Tel.: +1-509-453-4731

Fax: +1-509-457-4638

e-mail: [kmadsen@hopsteiner.com](mailto:kmadsen@hopsteiner.com)Simon H. Steiner, Hopfen GmbH  
Auhofstr. 18  
84048 Mainburg  
Germany

+49-8751-8605-0

+49-8751-8605-80

e-mail: [aschmid@hopsteiner.de](mailto:aschmid@hopsteiner.de)Steiner Hops Ltd.  
319A High Street  
Epping, Essex CM16 4DA  
United Kingdom  
+44-1992-572331  
+44-1992-573780  
e-mail: [trevor.roberts@hopsteiner.co.uk](mailto:trevor.roberts@hopsteiner.co.uk)**Information department:** see above**Emergency information:** National Poison Control Center Telephone: 1-800-222-1222

### 2 Hazards identification

**Hazard description:** Xi Irritant**Information pertaining to particular dangers for man and environment:**

R 36/38 Irritation to eyes and skin

**Classification system:**

The classification was made according to the latest editions of the EU-lists, and expanded using company data and specialized literature.

### 3 Composition / Data on components

**Chemical characterization****Description:**Beta Bio is produced from CO<sub>2</sub> extracted hops containing predominantly the natural  $\beta$ -acids fraction of hops extracted dissolved in alkaline water.**Dangerous components:** Void

### 4 First aid measures

**General information:**

If symptoms persist or in case of doubt seek medical advice.

**After inhalation:**

Inhalation of product is unlikely.

**After skin contact:**

Clean effected skin thoroughly with water and a mild cleansing agent. No residues shall remain on the skin.

**After eye contact:**

Rinse the eyes with open eyelids for 10 – 15 minutes with water. Then consult a doctor or better an eye specialist.

**After swallowing:**

Rinse out mouth and then drink plenty of water. If symptoms occur or after swallowing of larger quantities consult a doctor.

**Information for doctor:****Treatment:**

Symptomatic treatment

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### 5 Fire fighting measures

**Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.

**Special hazards caused by the material, its products of combustion or resulting gases:**

Dangerous decomposition product see chapter 10: stability and reactivity

**Protective equipment:** Wear self-contained respiratory protective device.**Additional information:** Dispose of fire debris and contaminated fire fighting water in accordance with official regulations. Collect contaminated fire fighting water separately. It must not enter the sewage system.

### 6 Accidental release measures

**Person-related safety precautions:**

Wear protective clothing. Avoid contact with eyes and skin.

**Measures for environmental protection:**

Do not allow product to reach sewage system or any water course. In case of seepage into the ground inform responsible authorities.

**Measures for cleaning/collecting:**

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Clean the affected area carefully; suitable cleaners are: warm water and cleansing agent. Send for recovery or disposal in suitable receptacles.

### 7 Handling and storage

**Handling****Information for safe handling:**

Avoid contact with eyes and skin

**Information about protection against explosions and fires:**

Keep ignition sources away – Do not smoke.

**Storage****Requirements to be met by storerooms and receptacles:**

Store at ambient temperature.

**Information about storage in one common storage facility:**

Not required.

**Further information about storage conditions:**

Excellent storage stability at temperatures below 25° C in unopened, original containers. Bulk storage in heated tanks (up to 40° C) is also possible provided the product is not directly exposed to air and used within about 3 months. Protect from contamination and frost.

**Maximum storage temperature:** 25° C**Minimum storage temperature:** 2° C**Storage time:** Up to 2 years when stored correctly**Storage class:** 10 Combustible liquids

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### 8 Exposure controls and personal protection

#### **Additional information about design of technical systems:**

No further data; see item 7.

#### **Components with limit values that require monitoring at the workplace:**

57-55-6 propane-1,2-diol

WEL (Great Britain): Long-term value: 474\* 10\*\* mg/m<sup>3</sup>, 150\* ppm

#### **Additional information:**

The lists that were valid during the creation were used as basis.

#### **Personal protective equipment**

##### **General protective and hygienic measures:**

The usual precautionary measures should be adhered to when handling chemicals.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

To avoid bacterial contamination it is recommended to use gloves and mask.

##### **Breathing equipment:**

Not necessary if room is well-ventilated.

##### **Protection of hands:**

Protective gloves. After use of gloves apply skin-cleaning agents and skin cosmetics. The glove material has to be impermeable and resistant to the product / the substance / the preparation. Due to missing tests no recommendation to the glove material can be given for the product / the preparation / the chemical mixture. Selection of the glove material on 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 break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

##### **Eye protection:**

Safety glasses

##### **Body protection:**

Protective work clothing.

### 9 Physical and chemical properties

#### **General Information**

**Form:**

clear or slightly hazy, viscous liquid

**Colour:**

Brown

**Odour:**

Characteristic, floral

#### **Value/Range Unit Method**

**Change in condition:****Melting point/Melting range:**

undetermined

**Boiling point/Boiling range:**

undetermined

**Flash point:**

not applicable

**Self igniting:**

Product is not self-igniting.

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<b>Danger of explosion:</b>	Product does not present an explosion hazard.	
<b>Density:</b>	at 20° C	1.07 ± 0.01 g/ml
<b>Solubility in / Miscibility with Water:</b>	miscible	
<b>pH-value in water:</b>	at 20° C	11.0 ± 0.5 (1 pt product : 3.5 pts water)
<b>Additional information:</b>	miscible with alcohol	

## 10 Stability and reactivity

### **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications. Conditions to be avoided: see chapter 7

**Dangerous reactions:** No dangerous reactions known.

### **Dangerous products of decomposition:**

In the case of fire or at high temperatures the formation of the following decomposition products is possible: Carbon monoxide and carbon dioxide.

## 11 Toxicological information

### **Acute toxicity:**

### **LD/LC50 values that are relevant for classification:**

No toxicity data are available for the product itself.

### **Primary irritant effect:**

**on the skin:** Continuing or repeated contact with the skin may cause skin disease.**on the eye:** May cause irritation to the eyes.**Sensitization:** No sensitizing effects known.

### **Additional toxicological information:**

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

## 12 Ecological information

### **Ecotoxicological effects:**

### **Aquatic toxicity:**

### **General notes:**

Presently there are no ecotoxicological values available.

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for 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. Danger to drinking water is possible if large quantities leak into the ground or into water course.

## 13 Disposal considerations

### **Product:**

**Recommendation:** Disposal according to instructions of local authorities.**European waste catalogue:** 02 03 99: wastes not otherwise specified

### **Uncleaned packagings:**

**Recommendation:** Disposal must be made according to official regulations.

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### 14 Transport information

**Land:**

**ADR/RID class (cross-border):** Not a hazardous good according to the regulation.  
**Domestic (D.O.T):** Not a hazardous good according to the regulation.

**Water:**

**IMDG Class:** Not a hazardous good according to the regulation.  
**Marine pollutant:** Not a hazardous good according to the regulation.

**Air:**

**ICAO/IATA Class:** Not a hazardous good according to the regulation.

### 15 Regulations

**Markings according to EC guidelines:**

Observe the general safety regulations when handling chemicals. The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV). Although this product is not subject to identification regulations, we recommend to observe the safety suggestions.

**Code letter and hazard designation of product:** Xi Irritant

**Risk phrases:** R 36/38 Irritation to eyes and skin

**Safety phrases:** S 24/25 Avoid contact with skin and eyes.  
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

### National regulations

**Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

### 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.

**Department issuing SDS:**

Kevin K. Madsen  
Technical Services Manager  
1 West Washington  
Yakima, WA 98903  
USA  
Tel.: 509-453-4731  
Fax: 509-457-4638  
e-mail: [kmadsen@hopsteiner.com](mailto:kmadsen@hopsteiner.com)

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