

# Tetrahop Gold®

## Material Safety Data Sheet

1. Product and Supplier Information	
Name:	<b>Tetrahop Gold®</b>
Synonyms:	Reduced isomerized hop extract 'Tetra' Tetrahydroiso-humulones Tetrahydro-iso-alpha extract Tetrahydro-iso-alpha-acids
Supplier:	<b>Barth-Haas Group/Botanix Ltd.</b> Botanix Ltd., The Moor, Eardiston, Tenbury Wells, Worcestershire, WR15 8JJ, UK Emergency phone: +44 1568 797895 or +44 1584 875395 Email: <a href="mailto:intraday@botanix.co.uk">intraday@botanix.co.uk</a> <b>Barth-Haas Group/John I. Haas, Inc.</b> 5185 MacArthur Boulevard, N.W., Suite 300, Washington, DC, 20016 USA Emergency phone: +1 202 777 4800 Email: <a href="mailto:info@johnihaas.com">info@johnihaas.com</a>
2. Components/Composition	
Aqueous solution of potassium salts of Tetrahydro-iso-alpha-acids:	8.6%-9.4%
Potassium Hydroxide	1-1.99%
3. Health Hazard Data	
Main hazards:	irritating to eyes and skin
Oral ingestion:	Ingestion of large dose may cause irritation of mouth, throat and digestive tract. It is extremely bitter and mildly alkaline.
Eye contact:	Liquid will cause severe conjunctiva irritation and corneal damage.
Skin contact:	Liquid may cause irritation, prolonged contact may cause dermatitis.
4. Emergency and First Aid Procedures	
Oral ingestion:	Drink large amounts of milk or water to dilute. Follow with fruit juice to neutralize. Vomiting may occur but should not be induced. Consult a physician.
Eye contact:	Flood the eye with plenty of water. Obtain medical attention.
Skin contact:	Wash skin thoroughly with soap and water.
5. Fire and Explosion Hazard Data	
Extinguishing media:	Not applicable
Special fire fighting procedures:	None
Unusual fire and explosion hazards:	None
Lel:	Not applicable
Uel:	Not applicable

**6. Accidental Release/Spill measures**

Personal protection:	Wear appropriate protective clothing.
Environmental precautions:	Prevent material from entering drains or water courses.
Absorb spill on fly ash or other absorbent material. Scoop/shovel into disposal container. Flush area with water to remove final traces.	

**7. Handling and Storage**

Storage temperature	15-25 °C (60-77 °F)
Keep container closed when not in use. Use open containers as soon as possible. Suitable storage is high grade stainless steel, glass and high density polyethylene.	

**8. Exposure Controls/Personal Protection**

Respirator:	Not required
Hand protection:	PVC or rubber gloves
Body protection:	If danger of splashing wear PVC or rubber apron
Eye protection:	Chemical goggles must be worn during handling

**9. Physical and Chemical Properties**

Form:	Liquid
Colour:	Yellow to amber
Odour:	Characteristic
Boiling Point:	200-220°F (93-104°C)
Density (kg/m <sup>3</sup> ):	1020 at 20 °C (typical)
Solubility in Water:	Miscible, will precipitate if acidified
Solubility in Alcohol:	Miscible
PH:	8.5-11.0
Flash point:	Not applicable due to high water content
Evaporation Rate:	<1 (aqueous solution)

**10. Stability and Reactivity**

Combustion will generate oxides of carbon, small amounts of aldehydes, ketones and alcohols. Stable under normal conditions. No known incompatibilities.

**11. Toxicological Information**

Substance is a modified hop extract which may safely be used in beer in accordance with FDA food additive regulation 21 CFR 172.560 (b) (6).

Acute toxicity: Low order of acute toxicity

**12. Ecological Information**

Mobility:	Major part of product will dissolve rapidly in water.
Bioaccumulation:	Product is not expected to bioaccumulate.
Exoticity:	No data

**13. Disposal Considerations**

Product disposal:	Dispose of in accordance with all applicable local and national regulations.
Container disposal:	Labels should not be removed from containers until they have been cleaned. Contaminated containers should not be treated as household waste. Containers should be cleaned using appropriate methods and then re-used or disposed of by landfill or incineration as appropriate.

**14. Transport Information**

UN-No: N/C	RID: N/C
Class: N/C	Packing Group: N/C

**15. Regulatory Information**

Labeling according to US and EC regulations

R-phrases: None

S-phrases: None

Einecs Listing: No data

**16. Other Information**

The information in this Safety Data sheet is correct to the best of our knowledge. This information should be used only as a supplement to information already in your possession concerning this product. The determination of whether and under what condition the product should be used by your employees is yours to make. We do not accept any liability for loss, injury or damage that may result from its use.