

Isohop®

Material Safety Data Sheet

1. Product and Supplier Information	
Name:	Isohop®
Synonyms:	Isomerized Hop Extract, 'Iso', Postfermentation Bittering, 'PFB'
Supplier:	<p>Barth-Haas Group/Botanix Ltd. Hop Pocket Lane, Paddock Wood, Kent, TN12 6DQ, UK Emergency phone: +44 1892 836 555 Email: intrad@botanix.co.uk</p> <p>Barth-Haas Group/John I. Haas, Inc. 5185 MacArthur Boulevard, N.W., Suite 300, Washington, DC, 20016 USA Emergency phone: +1 202 777 4800 Email: info@johnihaas.com</p>
2. Components/Composition	
Aqueous solution of potassium salts of iso-alpha-acids	28%-32% (Iso-alpha-acids: 3,4 Dihydroxy-5-(3 methyl-2-butenyl)-2-(3-methyl-1-oxybutyl)-4-(4-methyl-1-oxo-3-pentenyl)-2-cyclopenten-1-one, a mixture of isohumulone, isocohumulone and isoadhumulone.
CAS number:	25522-96-7
Einecs number:	2470721
TSCA:	not listed
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. 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	
Eye contact:	Flood the eye with plenty of water. Obtain medical attention
Skin contact:	Wash skin thoroughly with soap and water.
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.
5. Fire and Explosion Hazard Data	
Extinguishing media:	not applicable
Special fire fighting procedures:	N/A
Unusual fire and explosion hazards:	None

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	2 – 8 °C (36 - 46°F)
Keep container closed when not in use. Protect from light. Suitable storage is high grade stainless steel, low silicate 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
Color:	Pale yellow/amber
Odor:	Characteristic, resinous
Boiling Point:	93-104 °C (200-220 °F)
Density (kg/m ³):	1000-1200
Solubility in Water:	Miscible
Solubility in Alcohol:	Miscible
pH:	7.5-10.5
Flash point:	Not applicable due to high water content
Evaporation Rate:	<1 (aqueous solution)
10. Stability and Reactivity	
Combustion will generate oxides of carbon. 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. 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.