

LactoStab®

Safety Data Sheet

1. Identification of the Substance and of the Company				
1.1 Product Identifier:	LactoStab®			
1.2 Relevant Uses:	Food processing aid.			
1.3 Supplier:	Barth-Haas Group / BetaTec Hopfenprodukte GmbH			
1.4 Emergency Contact Details:	Bahnhofstr. 20, 91126 Schwabach, Germany Emergency phone: +49 9122 87301-0 (office hours) Email: info@betatec.eu Barth-Haas Group / BetaTec Hop Products, Inc. 5185 MacArthur Blvd., N. W., Suite 300, Washington D. C. 20016, USA. Emergency phone: +1 202 777 4800 (office hours) Email: info@betatechopproducts.com			
2. Hazards Identification				
2.1 Classification:	Not classified (Regulation (EC) No. 1272/2008) Not classified (Directive 67/548/EEC)			
2.2 Label Elements	N/A (not classified)			
2.3 Other Hazards:	Ingestion of a large dose may cause irritation of mouth, throat and digestive tract. Since the product is mildly alkaline, it may cause irritation if in contact with eyes.			
3. Components/Information on Ingredients				
Component	Concentration	CAS no.	EINECS no.	Hazard classification
Hydrogenated isomerised hop alpha acids	9% w/w	92113-15-0	295-619-8	Not classified
Water	Balance	7732-18-5	231-791-2	Not classified
4. First Aid Measures				
4.1 Description of First Aid Methods:	<u>Inhalation:</u> None. <u>Skin contact:</u> Wash skin thoroughly with soap and water. <u>Eye contact:</u> Flood the eye with plenty of water. If any symptoms persist obtain medical attention. <u>Oral ingestion:</u> This product is extremely bitter. Drink large amounts of water to dilute. Vomiting may occur but should not be induced. Consult a physician if any symptoms persist.			
4.2 Most Important Symptoms and Effects	May cause irritation if in contact with eyes.			
4.3 Indication of Immediate Medical Attention or Special Treatment	None known.			

5. Fire-Fighting Measures	
5.1 Extinguishing Media:	Dry powder, foam, carbon dioxide or water.
5.2 Special Hazards Arising from Substance:	The product is an aqueous solution and is therefore not expected to burn. No known unusual fire or explosion hazards.
5.3 Advice for Firefighters:	Wear self-contained breathing apparatus.
6. Accidental Release Measures	
6.1 Personal Protection:	Wear appropriate protective clothing – see Section 8.
6.2 Environmental Precautions:	Do not discharge onto the ground or into watercourses.
6.3 Methods for Cleaning Up:	Contain spillage using earth, sand or other inert material. Transfer to suitable sealed container prior to disposal. Flush area with hot soapy water to remove final traces.
7. Handling and Storage	
7.1 Precautions for Safe Handling:	Avoid excessive contact with product. Use appropriate protective clothing as indicated in Section 8. Wash hands after use.
7.2 Conditions for Safe Storage:	Store at 15 – 25 °C (59 – 77 °F). Keep container closed. Store in original container. Protect from light and prevent from freezing.
7.3 Specific End Uses:	It should be used in accordance with applicable legislation.
8. Exposure Controls/Personal Protection	
8.1 Control Parameters:	Not applicable.
8.2 Exposure Controls:	<u>Engineering Controls:</u> Not required. <u>Eye/Face Protection:</u> Safety goggles. <u>Hand Protection:</u> PVC, rubber, latex or nitrile gloves. <u>Skin Protection:</u> If danger of splashing, wear a PVC or rubber apron. <u>Respiratory Protection:</u> Not required.
9. Physical and Chemical Properties	
Appearance:	Pale yellow/amber liquid.
Odour:	Slight hop aroma.
Odour Threshold:	No data available.
pH:	8.5 – 11.0
Freezing Point:	<0 °C
Boiling Point:	93 – 104 °C (200 – 220 °F)
Flash Point:	Not applicable due to high water content.
Evaporation Rate:	Not measured (high water content; substantial evaporation not expected at normal conditions).
Flammability:	Nonflammable.
Upper/Lower Flammability:	N/A
Vapour Pressure:	No data available.
Vapour Density:	No data available.

Density:	Typically 1020 kg.m ⁻³
Solubility in Water:	Dilution can lead to precipitation. Will precipitate if acidified.
Partition Coefficient:	No data available.
Auto-ignition Temperature:	No data available.
Decomposition Temperature:	No data available.
Viscosity at 20°C:	Typically 5 mPa.s
Explosive Properties:	None known.
Oxidising Properties:	None known.
10. Stability and Reactivity	
10.1 Reactivity:	No reactivity hazards known.
10.2 Stability:	Stable under normal conditions, if stored in accordance with 7.2 and 10.5.
10.3 Possibility of Hazardous Reactions:	None known.
10.4 Conditions to Avoid:	None known.
10.5 Incompatible Materials	May precipitate on mixing with any material.
10.6 Hazardous Decomposition Products	None known.
11. Toxicological Information	
<p>Substance contains modified hop extract, which may be safely used in beer in accordance with US FDA regulation 21 CFR 172.560. The substance has not been fully assessed.</p> <p>Not considered harmful by ingestion (see 4.1; the product is extremely bitter).</p> <p>Not considered harmful in contact with skin, but observe precautions in section 8.2. May cause slight skin irritation due to its slight alkaline nature, but does not require classification as an irritant.</p> <p>May cause slight eye irritation due to its slight alkaline nature, but does not require classification as an irritant. Observe precautions in section 8.2.</p> <p>Skin sensitization – although some plant extracts can be sensitizing to the skin, we are not aware of sensitization caused by this product.</p>	
12. Ecological Information	
To the best of our knowledge, the substance has not been fully assessed so its ecological information is not available.	
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, recycled or disposed of in accordance with applicable local or national regulations.

14. Transport Information	
14.1 UN-Number:	Not listed.
14.2 Shipping Name:	N/A
14.3 Transport Hazard Classes:	Not hazardous for transport.
14.4 Packing Group:	Not listed.
14.5 Environmental Hazards	Not listed.
14.6 Special Precautions	None known.
15. Regulatory Information	
15.1 Safety, Health and Environmental Regulations:	Not classified (Regulation (EC) No. 1272/2008). Not classified (Directive 67/548/EEC).
15.2 Chemical Safety Assessment:	No data available.
16. Other Information	
<p>The information in this safety data sheet is believed to be correct but does not purport to be all- inclusive and shall be used only as a guide. The information in this document is based on our present knowledge and should be used only as a supplement to information already in your possession concerning this product. It does not represent any guarantee of the properties of the product. The determination of whether and under what condition the product should be used is yours to make. We do not accept any liability for loss, injury or damage that may result from its use.</p> <p>Date of issue: 16 August 2013</p>	