


HopGuard[®] II

Safety Data Sheet

1. Identification of the Substance and of the Company			
1.1 Product Identifier:	HopGuard[®] II HopGuard [®] Liquid impregnated corrugated cardboard, mylar-backed strips packaged in laminated foil and film.		
1.2 Relevant Uses:	For use in beehives to control Varroa mites, (<i>Varroa destructor</i>) on honey bees.		
1.3 Supplier:	Barth-Haas Group / BetaTec Hop Products, Inc.		
1.4 Emergency Contact Details:	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:	GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Eye irritation (Category 1), H318		
2.2 Label Elements	GHS Label elements, including precautionary statements Pictogram(s):  Signal Words: Danger Hazard Statements: H318: Causes serious eye damage Precautionary Statement(s): P262: Do not get in eyes, on skin, or on clothing. P264: Wash thoroughly after handling P270: Do not eat drink or smoke when using this product P280: Wear eye protection		
2.3 Other Hazards:	None		
3. Components/Information on Ingredients			
Component	Concentration	CAS no.	EINECS no.
Potassium salts of hop beta acids including; Lupulone: Colupulone: Adlupulone:	16% w/w	468-28-0 468-27-9 31769-60-5	Not established
Inert solvents	Balance	Not established	Not established

4. First Aid Measures	
4.1 Description of First Aid Methods:	<p><u>Inhalation:</u> None.</p> <p><u>Skin contact:</u> If on skin or clothing; take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes</p> <p><u>Eye contact:</u> Hold eyelids open and flush with a steady, gentle stream of water for 15-20 minutes/ Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for advice</p> <p><u>Oral ingestion:</u> Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.</p>
4.2 Most Important Symptoms and Effects	Causes irreversible eye damage
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:	No known unusual fire or explosion hazards.
5.3 Advice for Firefighters:	Wear self-contained breathing apparatus for firefighting, if necessary.
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:	<p>Avoid excessive contact with product. Use appropriate protective clothing as indicated in Section 8. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.</p> <p>Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.</p>

7.2 Conditions for Safe Storage:	Store at or below room temperature. Keep container closed. Unused strips should be stored in a tightly sealed, cool dark area. 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:	<table border="0"> <tr> <td><u>Engineering Controls:</u></td> <td>Not required.</td> </tr> <tr> <td><u>Eye/Face Protection:</u></td> <td>Safety goggles or face shield</td> </tr> <tr> <td><u>Hand Protection:</u></td> <td>PVC, rubber, latex or nitrile gloves.</td> </tr> <tr> <td><u>Skin Protection:</u></td> <td>Normal working clothes. Launder contaminated clothing before reuse.</td> </tr> <tr> <td><u>Respiratory Protection:</u></td> <td>Not required.</td> </tr> </table>	<u>Engineering Controls:</u>	Not required.	<u>Eye/Face Protection:</u>	Safety goggles or face shield	<u>Hand Protection:</u>	PVC, rubber, latex or nitrile gloves.	<u>Skin Protection:</u>	Normal working clothes. Launder contaminated clothing before reuse.	<u>Respiratory Protection:</u>	Not required.
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<u>Eye/Face Protection:</u>	Safety goggles or face shield										
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<u>Respiratory Protection:</u>	Not required.										

9. Physical and Chemical Properties

Appearance:	Amber/brown liquid
Odor:	Resinous
Odor Threshold:	No data available.
pH:	pH of a 1% solution by mass of HopGuard [®] Liquid (MP) : 9.0 – 10.0
Freezing Point:	<0 °C
Boiling Point:	Not applicable
Flash Point:	No data available
Evaporation Rate:	No data available
Flammability:	Nonflammable.
Upper/Lower Flammability:	No data available
Vapor Pressure:	No data available
Vapor Density:	No data available
Density:	Typically 1.0 g/mL at 25 °C (77 °F)
Solubility in Water:	Sparingly
Partition Coefficient:	No data available
Auto-ignition Temperature:	No data available
Decomposition Temperature:	No data available.
Viscosity at 20°C:	No data available
Explosive Properties:	No data available
Oxidizing Properties:	No data available

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	
Causes irreversible eye damage. Category 1 eye irritant. Observe precautions in section 8.2.	
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:	Unused HopGuard [®] II strips, packaging material and residual liquid in the package are non-hazardous waste per EPA definition and should be disposed of as non-hazardous solid waste in accordance with the Resource Conservation Recovery Act (RCRA), i.e. place in garbage bag and dispose in landfill.
Container disposal:	Containers (packaging material) should be disposed of in accordance with applicable local or national regulations for the disposal of solid waste
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:	EPA Registration Number: 83623-2
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: 28 October 2015 Revised: 21 December 2015 Revised: 16 September 2016</p>	