



AROMATRIX FLORA PVT. LTD.

Factory: Plot No. 242, HPSIDC Industrial Area, Baddi,
District Solan, Himachal Pradesh -173205, INDIA
Tel.: +91-1795-244901; Fax: +91-1795-247300
E-mail: aromatrixflora@hotmail.com

Rho-Extract

Material Safety Data Sheet

Note
<p><i>Rho-Extract</i> is not classified as dangerous product according to European Union legislation, and its use is as a food product in the brewing of beer. However, this safety data sheet is provided voluntarily according (as appropriate) to the principles of the Classification, Labelling and Packaging Regulations (Regulation (EC) No.1272/2008).</p>

1. Product and Supplier Information

Name:	Rho-Extract
Synonyms:	Light Stable Kettle Extract (LSKE)
Supplier:	Aromatrix Flora Pvt. Ltd. Plot No. 242, HPSIDC Industrial Area Baddi, District Solan, Himachal Pradesh-173205
Emergency Contact Details:	Tel: +91-1795-244901 (9:00 – 6:00 pm IST; Mon-Sat); Fax:+91-1795-247300 Email: aromatrixflora@hotmail.com

2. Hazard Identification

Classification:	Not classified (Regulation (EC) No. 1272/2008) Not classified (Directive 67/548/EEC)
Label Elements:	N/A (not classified)
Other Hazards:	This product is an ingredient for beer, and is bitter. It has not been fully tested. Ingestion of a large dose may cause irritation of mouth, throat and digestive tract. The product may cause eye irritation and prolonged handling may cause dermatitis.

3. Components/Composition

The product is a mixture of reduced (*Rho*) isomerized hop bitter acids (viz. *Rho*-iso- α -acids in their potassium salt form), hop resins and essential oils. The reduced (*Rho*) isomerized bitter acid content varies according to the original hop variety extracted, but typically the range will be 40 - 45 % *Rho*-iso- α -acids.

4. Emergency and First Aid Procedures

Description of First Aid Methods:	<u>Inhalation</u> : Move to fresh air. <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.
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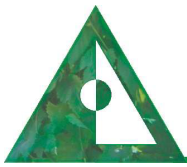
	<u>Oral Ingestion:</u> The product is very bitter and it is very unlikely that anyone would ingest large amounts. Should this happen drink large amounts of water to dilute. Vomiting may occur but should not be induced. Obtain medical attention if symptoms persist.
Most Important Symptoms and Effects:	May cause irritation of eyes if in contact with eyes.
Indication of Immediate Medical Attention or Special Treatment:	None Known
5. Fire-Fighting Measures	
Extinguishing media:	Carbon dioxide, dry powder and foam.
Special Hazards Arising from Substance:	Contains hop oil. Hop oil is combustible and may give rise to hazardous fumes in a fire.
Advice for Firefighters:	Fire fighters should wear self-contained positive pressure breathing apparatus.
6. Accidental Release/Spill measures	
Personal protection:	Wear appropriate protective clothing – see Section 8.
Environmental precautions:	Do not allow product to enter drains or water courses.
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. Use adequate ventilation or a respirator if in a confined area.
7. Handling and Storage	
Precautions for Safe Handling:	Avoid excessive contact with product. Use appropriate protective clothing as indicated in Section 8. Wash hands after use.
Conditions for Safe Storage:	Store at 0 – 10 °C (32 – 50 °F). Keep container closed when not in use. Use opened containers as soon as possible. Suitable storage is in glass, high density polyethylene, and high phenolic lacquered mild steel.
Specific End Uses:	The substance is manufactured for use as a food ingredient and for such uses is not subject to registration via REACH (Regulation (EC) No.1907/2006). It should be used in accordance with applicable food legislation.
8. Exposure Controls/Personal Protection	
Control Parameters:	Not Applicable
Exposure Controls:	<u>Engineering Controls:</u> Provide adequate ventilation. <u>Eye/Face Protection:</u> Wear chemical goggles during handling. <u>Hand Protection:</u> PVC, rubber, latex or nitrile gloves.



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	<u>Skin Protection:</u> If danger of splashing wear PVC or rubber apron. <u>Respiratory Protection:</u> Not normally required.
9. Physical and Chemical Properties	
Appearance:	Viscous liquid, yellow/orange to brown/green
Odour:	Characteristic, resinous aroma
Odour Threshold:	No data available
pH:	No data available
Melting Point:	40 – 60 °C (104 – 140 °F), depending on variety
Boiling Point:	>100 °C
Flash Point:	>60 °C
Evaporation Rate:	No data available
Flammability:	No data available
Upper/Lower Flammability:	No data available
Vapour Pressure:	No data available
Vapour Density:	No data available
Density:	850 – 1100 kg.m ⁻³
Solubility in Water:	Insoluble; forms an emulsion
Partition Coefficient:	No data available
Autoignition Temperature:	No data available
Decomposition Temperature:	No data available
Viscosity at 20 °C:	No data available
Explosive properties:	No data available
Oxidising properties:	No data available
10. Stability and Reactivity	
Reactivity:	No reactivity hazards known
Chemical Stability:	Stable if stored in accordance with Section 7
Possibility of Hazardous Reactions:	None known
Conditions to Avoid:	Keep container closed when not in use
Incompatible Materials:	None known
Hazardous Decomposition Products:	None known
11. Toxicological Information	
Acute toxicity:	
<u>LD/LC50 values that are relevant for classification:</u> No toxicity data are available for the product itself.	



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Primary irritant effect:

on the skin: not determined; light irritation of the skin is possible

on the eye: not determined; irritation to the eyes is possible

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. The substance is not subject to classification.

12. Ecological Information

Ecotoxicological effects: Presently there are no ecotoxicological values available.

Aquatic toxicity: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water. Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

13. Disposal Considerations

Product disposal:	Dispose of in accordance with all applicable local and national regulations.
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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.
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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. Regulatory Information

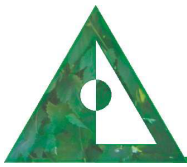
Markings according to EC guidelines:

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



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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

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.

Date of issue: 25 October 2016