



Form: CF.PROD.031 Rev 005

Effective Date: 06 February 2019

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Title: HopAlpha® Safety Data Sheet**SECTION 1: IDENTIFICATION OF THE SUBSTANCE, PREPARATION AND COMPANY.**

1.1 Product Name – This safety data sheet covers the following products:

HopAlpha® Iso 30% HA-46006

HopAlpha® Rho 30% HA-46004

HopAlpha® Tetra 9% HA-46005

HopAlpha® Iso 20% HA-46003

HopAlpha® Niso 25% HA-46007

HopAlpha® Hexa HA-46008

1.2 Relevant Uses – For use as an ingredient in the brewing of beer.

1.3 Supplier – Totally Natural Solutions Ltd.

1.4 Emergency Contact Details –

Unit 3a Arnold Business Park, Branbridges Road, East Peckham, Kent, TN12 5LG, UK.

Emergency phone: +44 (0) 1622 872105 (08.30 – 17.00 Mon – Fri UK time)

Mobile: +44 (0) 7766 201593

Email: info@totallynaturalsolutions.com

SECTION 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 – This product is an ingredient for the bittering of beer and is therefore extremely bitter. A large ingested dose may cause mouth, throat and digestive tract irritation. The product is also mildly alkaline and so may cause irritation if it comes in to contact with the eyes.

SECTION 3: COMPONENTS/INFORMATION ON INGREDIENTS.

HopAlpha® Iso and Niso – Contains potassium salts of isohumulones for stated concentration.

HopAlpha® Rho – Contains potassium salts of dihydro-isohumulones for stated concentration.

HopAlpha® Tetra – Contains potassium salts of tetrahydro-isohumulones for stated concentration.

HopAlpha® Hexa – Contains dihydro tetra isohumulones at 10%

SECTION 4: FIRST AID MEASURES.

4.1 Description of First Aid Measures –
Inhalation: None.

Skin Contact: Wash skin thoroughly with soap and water.

Eye Contact: Wash eye with plenty of water. Obtain medical attention if symptoms persist.

Oral Ingestion: This product is extremely bitter, so it is unlikely an individual would be able to ingest a large quantity. If this should occur, however, then drink large amounts of water to dilute. Vomiting should not be induced but may occur naturally. Seek medical advice should any symptoms persist.

4.2 Most Important Symptoms and Effects –
Eye irritation may occur if the product comes into contact.

4.3 Indication of Immediate Medical Attention or Special Treatment - No data available.

SECTION 5: FIRE-FIGHTING MEASURES.

5.1 Extinguishing Media – Carbon dioxide, foam, dry powder or water.

5.2 Special Hazards Arising from Substance – The product is an aqueous solution, and so therefore not expected to burn. No known fire or explosion hazards.



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5.3 Advice for Firefighters – Fire fighters should wear self-contained positive pressure breathing apparatus.

SECTION 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. Wash spillage site with hot soapy water.

SECTION 7: HANDLING AND STORAGE.

7.1 Precautions for Safe Handling – Avoid spilling, skin and eye contact. Wash hands after use.

7.2 Conditions for Safe Storage – Keep container closed when not in use. Suitable storage is high-grade stainless steel, low silicate glass or high-density polyethylene. Protect from light. Store at 10 - 25 °C (50 - 77 °F).

7.3 Specific End Uses – This product is manufactured for use as a food ingredient and for such uses it is not subject to registration via REACH (Regulation (EC) No.1907/2006). It should be used in accordance with applicable food legislation.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION.

8.1 Control Parameters – Not applicable.

8.2 Exposure Controls –

Engineering Controls: Not required.

Eye/Face Protection: Safety glasses or goggles.

Hand Protection: Suitable protective gloves if risk of skin contact, such as PVC, rubber, latex or nitrile.

Skin Protection: If danger of splashing wear PVC or rubber apron.

Respiratory Protection: Not required.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES.

Appearance:	Yellow/ Amber/ Brown liquid
Odour:	Hoppy, resinous
Odour Threshold:	No data available
pH:	7.5 – 10.5
Freezing point:	No data available
Boiling point:	>93 - 104°C (200 - 220 °F)
Flash Point:	N/A High water content
Evaporation Rate:	No data available
Flammability:	Non-flammable
Δv Flammability:	N/A
Vapour Pressure:	No data available
Vapour Density:	No data available
Density:	1,000 – 1,200 kg.m ⁻³
Solubility in h ₂ O:	Miscible. Will precipitate if acidified
Auto ignition Temperature:	No data available
Partition Coefficient:	No data available
Decomposition Temperature:	No data available
Viscosity at 20°C:	Iso: 10 – 20 mPas Rho: No data available
Explosive properties:	None known
Oxidising properties:	None known

SECTION 10: STABILITY AND REACTIVITY.

10.1 Reactivity – No reactivity hazards known.

10.2 Stability – Stable if stored in accordance with 7.2 and 10.5.

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None known.**10.4 Conditions to Avoid –** Protect from light.**10.5 Incompatible Materials –** Will precipitate if acidified.**10.6 Hazardous Decomposition Products –**
None known.**SECTION 11: TOXICOLOGICAL INFORMATION.**

This product contains modified hop extracts, which may be safely used in beer, e.g. in accordance with US FDA regulation 21 CFR 172.560. The substance has not been fully assessed.

Not considered harmful by ingestion (see 4.1; the product is extremely bitter).

Not considered harmful in contact with skin but observe precautions in section 8.2.

May cause slight skin irritation due to its alkaline nature but does not require classification as an irritant.

May cause slight eye irritation due to its alkaline nature but does not require classification as an irritant. Observe precautions in section 8.2.

Skin sensitisation – Although some plant extracts can be sensitising to the skin, there is no evidence of sensitisation caused by this product.

SECTION 12: ECOLOGICAL INFORMATION.

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS.**Product Disposal –** Dispose 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 incinerated as appropriate to local or national regulations.

SECTION 14: TRANSPORT INFORMATION.**UN-Number –** Not listed.**Class –** Non-hazardous for transport.**Shipping Name –** N/A**Packing Group –** Not listed.**Marine Pollutant –** No data available.**SECTION 15: REGULATORY INFORMATION.****15.1 Safety, Health and Environmental Regulations –** Not classified (Regulation (EC) No. 1272/2008).

Not classified (Directive 67/548/EEC).

The substance is a food ingredient and is therefore not subject to registration via REACH (Regulation (EC) No. 1907/2006).

15.2 Chemical Safety Assessment – No data available.**SECTION 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 at the time of publication and is given in good faith. We do not accept any liability for loss, injury or damage that may result from its use.