

## SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006  
OR/26 SDS Version 5 Revision Date 28/Feb/2022

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

#### 1.1 Product Identifier

Product Name: BITTER ORANGE STRONG INFUSION 20% ETHANOL  
Product Code: OR/26  
Index Number: N/A

#### 1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Use as a food flavouring ingredient in manufacturing.

Uses advised against: None

#### 1.3 Details of the supplier of the safety data sheet

Company: Ransom Naturals Limited  
Address: 53 Bury Mead Road, Hitchin, Herts, SG5 1RT, United Kingdom.

Email contact: Quality@ransomnaturals.com  
Telephone / Fax Number: +44 (0)1462 437615 / No Fax

#### 1.4 Emergency Telephone Number

Emergency Telephone Number: +44 (0)1462 437615 (office hours)  
+44 (0)7917 863807 (24 Hour)

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### SECTION 2: HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

##### Classification according to Regulation (EC) No. 1272/2008

Flammable Liquid Category 3, H226  
Eye Effects Category 2, H319

For the full text of H-Statements see Section 16

##### Primary Effects

Physicochemical: Flammable liquid and vapour.  
Human Health: Causes serious eye irritation.  
Environmental: None applicable

#### 2.2 Label elements

##### Labelling according to Regulation (EC) No. 1272/2008

Pictogram:



Signal Word: Warning

Hazard Statement(s): H226: Flammable liquid and vapour.  
H319: Causes serious eye irritation

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Precautionary Statement(s):

P210 – Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
P233 – Keep container tightly closed.  
P280 – Wear protective gloves/protective clothing/eye protection/face protection.  
P337 + P313 – If eye irritation persists: Get medical advice/attention.

**2.3 Other hazards**

This mixture is not classifiable as PBT or vPvB in accordance with Annex XIII of Regulation (EC) No. 1907/2006 based on an assessment of the constituent ingredients.

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**SECTION 3: Composition/information on ingredients**

**General compositional description**

An extract from the dried peel of Bitter Orange (*Citrus aurantium* L.), containing approximately 20%v/v Ethanol (CAS No 64-17-5), and water.

**Hazardous components according to Regulation (EC) No. 1272/2008**

<b>Component Name and identifiers</b>	<b>Classification</b>	<b>Concentration, %w/w</b>
<b>Ethanol Index No. 603-002-00-5</b>	<b>Flam. Liq. 2 – H225 Eye Irrit. 2 – H319</b>	<b>14 - 18</b>

For the full text of H-Statements and R-phrases see Section 16

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**Section 4: First Aid Measures**

**4.1 Description of first aid measures**

**General Advice**

Extinguish sources of ignition in the area.

**If inhaled**

Remove to fresh air, keep warm and at rest. If there are any difficulties with breathing give oxygen. If breathing stops or gives signs of failing apply artificial respiration and seek medical assistance.

**In case of skin contact**

Remove contaminated clothing; this should not be worn again until it has been laundered. Wash contaminated skin with soap and water.

**In case of eye contact**

Rinse eyes with water and remove contact lenses if possible. Irrigate eyes with water or eye wash solution for at least fifteen minutes. If discomfort persists seek medical assistance.

**If swallowed**

Wash mouth out thoroughly with water. Do not induce vomiting. If a significant quantity (>250ml) has been ingested seek medical advice.

**4.2 Most important symptoms and effects, both acute and delayed**

Ingestion: Ethanol taken to excess will cause depression of the central nervous system, indicated by nausea, vomiting, muscular incoordination, visual impairment and loss of

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consciousness. Aspiration during swallowing or vomiting will damage lungs.

**4.3 Indication of any immediate medical attention and special treatment needed**

For ingestion treat as alcohol poisoning.

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**SECTION 5: Firefighting Measures**

**5.1 Extinguishing media**

**Suitable extinguishing media**

Water spray, AFFF foam, chemical dry powder or carbon dioxide.

**Unsuitable extinguishing media**

None.

**5.2 Special hazards arising from the substance or mixture**

May produce carbon monoxide on burning.

**5.3 Advice for firefighters**

No specific information; use normal personal protective equipment.

**5.4 Further information**

None.

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**SECTION 6: Accidental release measures**

**6.1 Personal precautions, protective equipment, and emergency procedures**

Extinguish sources of ignition, and ventilate area. For large scale spillages evacuate area. Wear personal protective equipment as directed in Section 8.

**6.2 Environmental precautions**

Do not allow product to enter drains and watercourses. Inform local authority and fire service if preparation enters drains or watercourses.

**6.3 Methods and material for containment and cleaning up**

Use non-sparking tools. Absorb spillage using a proprietary absorbent or sand, scoop up and place in a suitable container; remove to a safe place and dispose of through a licensed waste disposal contractor for incineration. For large scale spillage use absorbent booms to contain the spillage.

**6.4 Reference to other sections**

For personal protective equipment required see Section 8; for disposal information see Section 13.

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**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

Ground/bond container and receiving equipment.  
Use explosion-proof electrical/ventilating/lighting equipment.  
Use only non-sparking tools.  
Take precautionary measures against static discharge.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in well closed containers away from direct sunlight, heat and sources of ignition at ambient temperature.

### 7.3 Specific end use(s)

No specific guidance relevant.

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## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Components with Occupational Exposure Limits

The following components have limits set in EH/40/2005 (Fourth Edition, 2020):

Ethanol, CAS 64-17-5, Long Term Exposure Limit (8hr TWA) 1000ppm, 1920mg/m<sup>3</sup>.

### 8.2 Exposure controls

#### Appropriate engineering controls

Local exhaust ventilation.

#### Individual protection measures, including personal protective equipment

##### Eye/face protection

Wear goggles or face-shield.

##### Skin protection

###### Hand protection

Wear protective gloves. Nitrile rubber or PVC are suitable.

###### Other body protection

None required

##### Respiratory protection

Use an appropriate CEN approved organic vapour mask or self-contained breathing apparatus if vapour or mist is likely to be present.

##### Environmental exposure controls

None applicable.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- |    |  |                                     |
|----|--|-------------------------------------|
| a) | <b>Appearance</b>                              | A clear orange brown mobile liquid. |
| b) | <b>Odour</b>                                   | Characteristic odour.               |
| c) | <b>Odour threshold</b>                         | No test data.                       |
| d) | <b>pH</b>                                      | 4.5 – 5.5                           |
| e) | <b>Melting/freezing point</b>                  | No test data.                       |
| f) | <b>Initial boiling point and boiling range</b> | 78°C to 100°C                       |

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g)	Flash point	35°C (Closed cup)
h)	Evaporation rate	No test data.
i)	Flammability (solid,gas)	Not applicable.
j)	Upper/lower flammability or explosive limits	Ethanol: Lower Limit 3.5%v/v; Upper Limit 19.0%v/v
k)	Vapour pressure	No test data.
l)	Vapour density	No test data.
m)	Relative Density	Approx. 0.99 at 20°C
n)	Solubility in	Water
o)	Partition coefficient: n-octanol/water	Ethanol: Log Pow = -0.32
p)	Auto-ignition temperature	No test data.
q)	Decomposition temperature	No test data.
r)	Viscosity	No test data - Mobile liquid.
s)	Explosive properties	No test data.
t)	Oxidising properties	None applicable.

### 9.2 Other information

None applicable.

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## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No known specific reactivity hazards.

### 10.2 Chemical Stability

Stable under all expected conditions of storage and handling.

### 10.3 Possibility of hazardous reactions

None relevant.

### 10.4 Conditions to avoid

None applicable.

### 10.5 Incompatible materials

Strong oxidising agents.

### 10.6 Hazardous decomposition products

None applicable.

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## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### Acute toxicity

Based on available data on the hazardous constituents identified in Section 3, the classification criteria are not met.

#### Skin corrosion/irritation

Based on available data on the hazardous constituents identified in Section 3, the classification criteria are not met.

#### Serious eye damage/Irritation

Based on the content of Ethanol the mixture is classified as Eye Irritant, Category 2.

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**Respiratory or skin sensitisation**

Based on available data on the hazardous constituents identified in Section 3, the classification criteria are not met. However, as a natural extract skin sensitisation reactions may occur.

**Germ cell mutagenicity**

Based on available data on the hazardous constituents identified in Section 3, the classification criteria are not met.

**Carcinogenicity**

Based on available data on the hazardous constituents identified in Section 3, the classification criteria are not met.

**Reproductive toxicity**

Based on available data on the hazardous constituents identified in Section 3, the classification criteria are not met.

**STOT-single exposure**

Based on available data on the hazardous constituents identified in Section 3, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data on the hazardous constituents identified in Section 3, the classification criteria are not met.

**Additional information**

None applicable.

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**SECTION 12: Ecological information**

**12.1 Toxicity**

<b>Toxicity to fish</b>	No data available for product. No constituents are classified with respect to toxicity to fish.
<b>Toxicity to Daphnia and other aquatic invertebrates</b>	No data available for product. No constituents are classified with respect to toxicity to aquatic invertebrates.
<b>Toxicity to algae</b>	No data available for product. No constituents are classified with respect to toxicity to algae.

**12.2 Persistence and degradability**

Based on available data on the hazardous constituents identified in Section 3, the product is expected to readily biodegrade.

**12.3 Bioaccumulative potential**

Based on available data on the hazardous constituents identified in Section 3, the product is unlikely to bioaccumulate.

**12.4 Mobility in soil**

For the hazardous constituents identified in Section 3:  
Ethanol is expected to have a very high mobility in soil.

**12.5 Results of PBT and vPvB assessment**

The mixture contains no constituents which are classified as PBT or vPvB.



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**12.6 Other adverse affects**

No information.

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**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Product**

Dispose of product through a suitable licenced waste disposal contractor.

**Contaminated packaging**

Rinse containers and send for recycling.

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**SECTION 14: Transport Information**

**This product is classified as non-hazardous for transportation by all modes under Special Provisions:**

**ADR (Road) /IMDG (Sea): Special Provision 144**

**IATA (Air): Special Provision A58**

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**SECTION 15: Regulatory information**

This safety data sheet has been compiled in accordance with the requirements of Regulation (EC) No. 1907/2006.

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

None applicable.

**15.2 Chemical safety assessment**

A chemical safety assessment has not been carried out for this product.

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**SECTION 16: Other information**

**Changes made in this update to the safety data sheet**

Update of the Safety Data Sheet in line with the requirements of Regulation (EC) No. 1907/2006 to current guidelines. All changes are marked.

**References used in compilation of this safety data sheet**

Regulation (EC) No. 1907/2006 on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Regulation (EC) No. 1272/2008 on classification, labelling, and packaging (CLP) of substances and mixtures.

European Agreement Concerning the International Carriage of Dangerous Goods by Road (ADR) 2019 Edition.

International Maritime Dangerous Goods Code 2018 Edition.

IATA Dangerous Goods Regulations 61<sup>st</sup> Edition 2020.

Martindale, 35th edition, pages 1462 (Ethanol), 1003 (Caffeine)

Sax's Dangerous Properties of Industrial Materials, eighth edition, page 1572 EFU000 (Ethyl Alcohol).

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Herbal Medicine, Expanded Commission E Monographs, Blumenthal, Goldberg & Brinckmann, First Edition, page 287 (Orange Peel, Bitter).

Natural Sources of Flavourings, Report No.1, Council of Europe, July 2000, page 127 (Citrus aurantium L. ssp. Aurantium L.)

C&L Inventory online, ECHA Website.

National Library of Medicine Hazardous Substances Data Bank online, entry for Ethanol.

### **Methods of evaluation used for classification of this mixture under Article 9 of Regulation (EC) No. 1272/2008**

This safety data sheet has been produced using expert judgement based on the classification of constituents of this product as allowed under Article 9.

### **Full text of H-statements referred to under other Sections**

H226 – Flammable liquid and vapour.

H319 – Causes serious eye irritation.

H225 – Highly flammable liquid and vapour.

H302 – Harmful if swallowed.

### **Training recommended to be carried out prior to use of this material**

All staff handling this material must be suitably trained in the safe use of chemicals in the relevant industry/workplace.

The information contained herein is, to the best of our knowledge, true and accurate. Any recommendations or suggestions are made without obligation on our part and the Company can accept no liability to any customer, their employees or any other person whatsoever for any loss, injury or damage whether direct or consequential, which may be caused by an error or omission from this sheet if negligent or otherwise.