

SAFETY DATA SHEET

According to 453/2010 EC Annex I, which replaces 1907/2006 Annex II

Bioactive Mandarin

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Issue Date: 01/06/2015

Section 1. IDENTIFICATION OF THE SUBSTANCE /MIXTURE AND THE COMPANY/ UNDERTAKING

- 1.1. Product identifier** Bioactive Mandarin
- 1.2. Relevant identified uses of the substance or mixture and uses advised against**
Biological toilet and urinal odour control product
- 1.3. Details of the supplier of the safety data sheet**
Genesis Biosciences
Unit P1, Capital Business Park
Capital Point, Parkway
Cardiff CF3 2PU
United Kingdom
info@genesisbiosciences.com
- 1.4. Emergency telephone number**
Telephone +44 (0) 29 2079 1185 (8am-5.30pm GMT Monday to Friday)

Section 2. HAZARDS IDENTIFICATION

- 2.1. Classification of the substance or mixture**
Classification according to 1272/2008/EC
Eye Irrit, 2 H319 Causes serious eye irritation Flam Liq. Cat 3, H226 Flammable liquid and vapour.

- 2.2. Label elements**
Labelling according to 1272/2008/EC

Hazard Pictograms



GHS-07 **GHS-02**

Signal word: Warning

Hazard statements

H319 Causes serious eye irritation, H226 Flammable Liquid and Vapour

Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
P264 Wash thoroughly after handling.
P280 Wear eye protection
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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P337 + P313 If eye irritation persists: Get medical advice/attention.

Supplemental Hazard Statements

EUH 208 Contains limonene may produce an allergic reaction

2.3. Other hazards None identified

Section 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable, material is a mixture

3.2. Mixtures

Hazardous ingredients declared according to Regulation (EC) No 1272/2008

CAS: 68439-46-3 EINECS: -	C9-C11 Alkyl alcohol ethoxylate	Acute Tox. 4, H302 Eye Dam. 1, H318	1-3%
CAS: 67-63-0 EINECS: 200-661-7	Iso-propanol	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE3, H336	1-5%
CAS: 85586-07-8 EINECS: 287-809-4	Sulphuric acid, mono-C12-C14 alkyl esters sodium salts	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318	1-5%
CAS: 5989-27-5 EINECS: 227-813-5	Limonene	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic chronic 1, H410	0.01-0.2%

Substances with workplace exposure limits, not listed above

CAS: 128-37-0 EINECS: 204-881-4	Butylated hydroxytoluene	<0.1%
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A full explanation of H-phrases appears in Section 16

Section 4. FIRST AID MEASURES

4.1. Description of first aid measures

Eye Contact Rinse immediately with plenty of water for several minutes holding the eyelids open.

Skin Contact Wash off immediately with plenty of soap and water. Remove contaminated clothing

Inhalation Move the exposed person to fresh air.

Ingestion Rinse mouth thoroughly.

Seek medical attention if irritation or any other symptoms persist.

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

See Section 11

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

No information available

Section 5. FIRE FIGHTING MEASURES

5.1. Extinguishing media Use extinguishing media appropriate to the surrounding fire conditions

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5.2. Special hazards arising from the substance or mixture

Product is an aqueous liquid so is not expected to burn or create special hazards

5.3. Advice for firefighters Wear full protective clothing and suitable respiratory equipment when necessary

Section 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear approved safety glasses or goggles.

6.2. Environmental precautions

Do not allow large amounts (i.e. more than 20 litres) of product to enter drains undiluted. Do not allow spillages to enter an open water course or surface water. Prevent further spillage if safe.

6.3. Methods and material for containment and cleaning up

Small spillages (<20 litres) can be washed to drain with water (but not to one that leads to an open water course or surface water). For larger spillages, absorb with inert material and sweep up. Transfer to suitable, labelled containers for disposal. Clean spillage area thoroughly with plenty of water

6.4. Reference to other sections

See sections 8 and 13 for additional information

Section 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with eyes and skin. Adopt best Manual Handling considerations when handling, carrying and dispensing.

7.2. Conditions for safe storage, including any incompatibilities

Keep in a cool dry, well-ventilated area. Keep containers tightly closed. Store in correctly labelled containers

7.3. Specific end use(s) No exposure scenario currently available

Section 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1. Control parameters

Ingredient	CAS	EC	Description	ppm	mg/m ³	Reference
Butylated hydroxytoluene	128-37-0	204-881-4	Long term exposure limit (8 hour TWA reference period)	-	10	UK EH40 Oct 2007
Propan-2-ol	67-63-0	200-661-7	Long term exposure limit (8 hour TWA reference period)	400	999	
			Short term exposure limit (15 minute reference period)	500	1250	

8.2. Exposure controls

Engineering measures Ensure adequate ventilation of the working area

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Respiratory protection	If aerosol generated, wear suitable half mask respirator with filter P2 (EN143)
Hand protection	Wear chemical resistance gloves (PVC, nitrile, neoprene or butyl)
Eye protection	Wear approved safety glasses or goggles
Protective equipment	Wash all contaminated clothing before re-use

Section 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Straw coloured liquid
Odour	Fresh fragrance
Odour threshold	Not determined
pH	9.5
Melting point/freezing point	0°C
Initial boiling point and boiling range	100°C
Flash point	35°C
Evaporation rate	Not determined
Flammability (solid, gas)	Flammable Liquid Cat 3.
Upper/lower flammability or explosive limits	Not determined
Vapour pressure	Not determined
Vapour density	Not determined
Relative density	1.0
Solubilities	Miscible in water
Partition coefficient n-octanol/water	Not determined
Autoignition temperature	Not applicable, product is an aqueous liquid
Decomposition temperature	Not determined
Viscosity	4.4-5.6 cSt.
Explosive properties	Not applicable, product is an aqueous liquid
Oxidising properties	Not applicable, product is an aqueous liquid

9.2. Other information None available

Section 10. STABILITY AND REACTIVITY

10.1. Reactivity	No specific hazard
10.2. Chemical stability	Stable under normal conditions
10.3. Possibility of hazardous reactions	Product is an aqueous liquid and no hazardous reaction are expected
10.4. Conditions to avoid	Not determined
10.5. Incompatible materials	None known
10.6. Hazardous decomposition products	None known

Section 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

a) Acute toxicity

Of component:

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C9-C11 Alkyl alcohol ethoxylate (CAS: 68439-46-3)

LD50: 2950 mg/kg (rat)

Estimated oral ATE for mixture is >100,000 mg/kg

The microorganisms in this product are all Group 1 (i.e. considered unlikely to cause human disease) according to EU Directive 2000/54/EC and related legislation.

b) Skin corrosion/irritation: Mixture not classified as corrosive to skin or causing skin irritation.

c) Serious eye damage/irritation: Classified as causes serious eye irritation.

d) Respiratory or skin sensitisation: Contains ingredients that cause sensitisation by skin contact, but at levels below at which mixture must be classified for skin sensitisation. Contains no ingredients that are classified as respiratory sensitisers.

e) Germ cell mutagenicity: Does not contain ingredients that are known germ cell mutagens

f) Carcinogenicity: Does not contain ingredients that are known carcinogens

g) Reproductive toxicity: Does not contain ingredients that are known reproductive toxicants

h) STOT single exposure: Does not contain ingredients that are known to cause single target organ toxicity with single exposure

i) STOT repeated exposure: Does not contain ingredients that are known to cause single target organ toxicity with repeated exposure

j) Aspiration hazard: Does not contain ingredients that are known to cause aspiration hazards

Section 12. ECOLOGICAL INFORMATION

12.1. Toxicity

Of component:

C9-C11 Alkyl alcohol ethoxylate (CAS: 68439-46-3)

LC50, fish, 96h : 2950 mg/kg
(Oncorhynchus mykiss (rainbow trout))

Contains ingredients that are toxic to the aquatic environment but at concentrations below that at which classification of mixture is required for acute or chronic effects

12.2. Persistence and degradability

Given the classification and degradability information on the ingredients and their concentration in the mixture, product is expected to be biodegradable to at least 95%.

The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation EC 648/2004 on detergents. Data to support this statement are held at the disposal of the competent authorities of the Member States.

12.3. Bioaccumulative potential

Given the classification and environmental behavior information on the ingredients and their concentration in the mixture, product is not expected to bioaccumulate

12.4. Mobility in soil

Aqueous product, fully soluble in water: not expected to be retained in soil to any significant extent

12.5. Results of PBT and vPvB assessment

Not anticipated to be PBT or vPvB

12.6. Other adverse effects

None known

Section 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods Dispose of in compliance with local and national regulations

Section 14. TRANSPORT INFORMATION

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- 14.1. UN number UN1993
- 14.2. UN proper shipping name Flammable Liquid, NOS (Contains IPA)
- 14.3. Transport hazard class(es) Class 3
- 14.4. Packing group II
- 14.5. Environmental hazards No
- 14.6. Special precautions for user Transport Code 3
Tunnel restriction (D/E)
- 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code
Not applicable

Section 15. REGULATORY INFORMATION

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

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

Section 16. ADDITIONAL INFORMATION

Revision This MSDS has been revised from Revision 6 to comply with the full implementation of the CLP Regulation (EC) No 1272/2008, namely the classification of ingredients and preparations using the new GHS/CLP symbols and phrases and communication of classification, hazards and advice according to the new rules. Previous errors and omissions have also been corrected. No changes to formulation of the product were made at this revision. Changes have been made to Sections 1, 2, 3, 4, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15 and 16.

Explanation of H-phrases that appear in section 3 H225 Highly flammable liquid and vapour
H226 Flammable liquid and vapour
H302 Harmful if swallowed
H315 Causes skin irritation
H317 May cause an allergic skin reaction
H318 Causes serious eye damage
H319 Causes serious eye irritation
H336 May cause drowsiness or dizziness
H400 Very toxic to aquatic life
H410 Very toxic to aquatic life with long lasting effects

References

Part 3 of Annex VI of Regulation (EC) No 1272/2008 <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2008:353:0001:1355:en:PDF>
Annex II Annex II of (EU) No 453/2010 <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:133:0001:0043:en:PDF>

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2nd ATP of CLP Regulation 286/2011, Table 3.4.6 <http://eur-lex.europa.eu/legalcontent/EN/TXT/PDF/?uri=OJ:L:2011:083:FULL&from=EN>

Method used to classify: Mixture has been classified by reference to information on ingredients

Further information The information supplied in this Safety Data Sheet is designed only as guidance for the safe use, storage and handling of the product. This information is correct to the best of our knowledge and belief at the date of publication however no guarantee is made to its accuracy. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any other process.