

This Safety Data Sheet cancels and replaces all preceding SDS for this product.

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

962191

MUSCENONE DELTA © Firmenich product

CAS No: 63314-79-4 EC No: 429-900-5

REACH No: 01-0000017618-62

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

Not for personal use in this form or concentration. Intended to be used in the manufacture of products for consumers.

1.3 Details of the supplier of the safety data sheet

Bella Mistry

Firmenich UK Ltd Hayes Road, Southall MIDDLESEX UB2 5NN - UNITED KINGDOM bella.mistry@firmenich.com

Tel: +44 208 843 61 11, Fax: +44 208 843 62 38

1.4 Emergency telephone number

Tel:+41.22.780.37.90 Available 24/7 (NCEC)

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) N° 1272/2008 [CLP/GHS] as amended

Skin Sensitization - Cat. 1B H317 Environmental Hazard (acute) - Cat. 1 H400 Environmental Hazard (chronic) - Cat. 1 H410

2.1.2 Classification according to 67/548/EEC or 1999/45/EC as amended

Symbols:

Χi Irritant

Ν Dangerous for the environment

Risks Phrases:

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Reference: GB Date of printing: 26-FEB-2014 11345808 Product: 962191 - MUSCENONE DELTA

> Page 1 / 9

Revised on: 20-Apr-2013 / v 6.3



This Safety Data Sheet cancels and replaces all preceding SDS for this product.

2.1.3 Additional information

Full text of listed statements: See section 16

2.2 Label elements

Hazard pictograms:





Signal Word:

Warning

Hazard Statements:

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

Supplemental Hazard information (EU):

Contains: 3-Methylcyclopentadecenone. May produce an allergic reaction.

Hazard Inducers:

3-Methylcyclopentadecenone

2.3 Other hazards

No data available at this time.

3 COMPOSITION/INFORMATION ON INGREDIENTS

11345808

Chemical substance.

Contains:

Reference: GB

Revised on: 20-Apr-2013 / v 6.3

Date of printing: 26-FEB-2014

Product : 962191 - MUSCENONE DELTA



This Safety Data Sheet cancels and replaces all preceding SDS for this product.

99.0 - 100.0%

3-Methylcyclopentadecenone N° CAS: 0063314-79-4

N° ELINCS: 429-900-5

N° REACH: 01-0000017618-62

Classification: Xi N - R43,R50/53

GHS Classification:

Skin Sensitization - Cat. 1B [H317]

Environmental Hazard (acute) - Cat. 1 [H400] Environmental Hazard (chronic) - Cat. 1 [H410]

4 FIRST-AID MEASURES

4.1 Description of first aid measures

General information:

As in all cases of potential poisoning, Obtain medical advice immediately.

In case of eye contact:

Irrigate copiously with water for at least 10 minutes. Obtain medical advice if any irritation or evidence of tissue damage persists.

In case of inhalation:

Remove the individual to fresh air and keep at rest. Obtain medical advice immediately.

In case of skin contact:

Remove contaminated clothes. Wash skin with large volumes of water.

If irritation persists, or any sign of tissue damage is apparent, obtain medical advice immediately.

In case of ingestion:

Rinse mouth with water. Obtain medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

No specific data available.

4.3 Indication of immediate medical attention and special treatment needed

No specific data available.

5 FIRE-FIGHTING MEASURES

5.1 Extinguishing media

In the event of fire, adequate extinguishers should be used. Avoid inhalation of smoke and fumes. In case of insufficient ventilation, wear suitable respiratory equipment.

5.2 Special hazard arising from the substance or mixture

No specific hazard known.

5.3 Advice for fire-fighters

No specific advice.

Reference: GB

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

11345808

Adequate protective gloves should be worn when handling spillages. No smoking. Avoid naked flames or other potential sources of ignition (eg. electrical equipment).

Date of printing: 26-FEB-2014
Product: 962191 - MUSCENONE DELTA

Page 3 / 9

Revised on : 20-Apr-2013 / v 6.3



This Safety Data Sheet cancels and replaces all preceding SDS for this product.

Avoid skin contamination and inhalation of vapour.

Individual washing routines should be followed after any potential contact.

Ensure adequate ventilation in working areas following accidental releases.

For emergency personnel:

Apply the same recommendations as section 6.1

6.2 Environmental precautions

Do not discharge directly into drains, air, into soil or into the aquatic environment.

6.3 Methods and material for containment and cleaning up

For containment:

Any absorbent used for cleaning up spillage should be disposed promptly, accordingly to local regulation. Gross spillages should be contained by any means, and disposal of this should be in accordance with

Government Regulations.

For cleaning-up:

Spillages should be disposed of in accordance with Governmental Regulations.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes.

Wear adequate protective gloves protection and eye/face protection.

No smoking. Avoid any sources of ignition.

Avoid exposing to high temperature during processing.

Do not ingest or apply to the skin as such. Good personal washing routines should be followed.

Maintain adequate local and general ventilation where product is handled.

7.1.1 Protective measures

Keep strict control of dust accumulation to a minimum. Maintain adequate local and general ventilation where product is handled. Avoid any sources of ignition.

7.1.2 Advice on general occupational hygiene

Good personal washing routines should be followed.

7.2 Conditions for safe storage, including any incompatibilities

It is good general practice to store in closed, preferably full, containers away from heat sources, and protected from extremes of temperature. Do not re-use the empty container.

Respect generals rules for compatibility storage.

7.3 Specific end use(s)

Not available at this time.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

11345808

8.1 Control parameters

8.2 Exposure controls

Reference: GB

Avoid exposing to high temperature during processing.

Date of printing: 26-FEB-2014 Product: 962191 - MUSCENONE DELTA

Revised on: 20-Apr-2013 / v 6.3

Page 4 / 9



This Safety Data Sheet cancels and replaces all preceding SDS for this product.

Maintain adequate local and general ventilation where product is handled.

8.2.1 Appropriate engineering controls

Maintain adequate local and general ventilation where product is handled and dispensed.

8.2.2 Environmental exposure controls

Not available at this time. Minimize release to the environment.

8.3 Personal protection

Respiratory protection: Where ventilation (LEV) is inadequate to prevent any inhalation of substances, use adequate respiratory apparatus.

Hand protection: Adequate Protective Gloves should be worn. Eye protection: Adequate safety glasses should be used.

Skin protection: Wear protective clothing, overall if necessary to limit the odour contamination of personal

clothing. Individual washing routines should be followed after any potential contact.

9 PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: LIQUID

Colour: COLOURLESS TO VERY PALE

YELLOW

Odour: Characteristic strong odour

> according to the commercial description of the substance.

pH: Not available Melting point/range (°C): Not available Initial boiling point/range (°C): Not available Flash point (closed cup): > 100°C Evaporation rate: Not available Flammability (solid/gas): Not available Upper/lower flammability or explosive Not available

limits:

Vapour pressure (Pa): .021331616 Vapour density: Not available Relative density (d 20/20): 0.925 - 0.935Water solubility (20°C): Not available

Partition coef. (n-octanol/water): 4.88

Not available Auto-ignition temperature (°C): Decomposition temperature : Not available Viscosity: Not available Explosive properties: Not available Oxidizing properties: Not available

10 STABILITY AND REACTIVITY

10.1 Reactivity

Reference: GB

No reaction known with water.

11345808

Revised on: 20-Apr-2013 / v 6.3 Date of printing: 26-FEB-2014 Product: 962191 - MUSCENONE DELTA

5 / 9 Page



This Safety Data Sheet cancels and replaces all preceding SDS for this product.

10.2 Chemical stability

Good stability at standard temperature.

10.3 Possibility of hazardous reactions

Not known.

10.4 Conditions to avoid

Avoid temperatures above or at least 5 °C below flash point for any flammable liquids.

Do not heat closed containers.

Avoid contact with oxidizing agents.

10.5 Incompatible materials

Not known.

10.6 Hazardous decomposition products

Contact with water or storage under recommended conditions for one year should not produce dangerous decomposition products.

11 TOXICOLOGICAL INFORMATION

LD50 (oral, rat) (OECD 401: limit): > 2000 mg/kg

LD50 (dermal, rabbit) (OECD 402 : limit) : > 2000 mg/kg

Irritation (dermal, rabbit) (OECD 404): non irritant @ 100%

Irritation (ocular, rabbit) (OECD 405): non irritant @ 100%

Sensitization (Guinea pig Maximization)(OECD 406): 60% dermal responses

Sensitization (Guinea pig Maximization)(OECD 406): non sensitizing in 2 tests

Sensitization (HRIPT): Non sensitizing @ 10%

Sensitization (HRIPT): Non sensitizing @ 20%

Sub-acute toxicity (28-day, gav., rat) (OECD 407): NOEL = 250 mg/kg/day

Mutagenicity (OECD 471): Non mutagenic

Mutagenicity (OECD 471): Non mutagenic

Mutagenicity (Mammalian cell gene, in vitro)(OECD 476): Non mutagenic

Genotoxicity (Human lymphocytes, in vitro)(OECD 473): Non clastogenic

Reproductive Toxicity (1 generation, gav., rat)(OECD 415): NOEL = 1000 mg/kg

12 ECOLOGICAL INFORMATION

Reference: GB

Acute Toxicity Algae (OECD 201): 72-h EC50 > 0.9 mg/l

Acute Toxicity Daphnia (OECD 202): 48-h EC50: 0.39 mg/l

Acute Toxicity Fish (OECD 203): 96-h LC50: 0.22 mg/l

Fish early-life stage toxicity Test (OECD 210): measured NOEC: 0.00098 mg/l

Daphnia reproduction test (OECD 211): measured NOEC = 0.011 mg/l

Acute Toxicity Earthworm (OECD 207): 14-d LC50 = 250 mg/kg

Terrestrial Plants, Growth Test (OECD 208): Oats, NOEC = 117 mg/kg,

Soybean, NOEC = 1100 mg/kg, Tomato, NOEC = 1100 mg/kg

Soil microorganism (OECD 216): No effects at 1000 mg/kg

Ready biodegradability (OECD 301F): 61% (10-day window criteria not met)

Ready biodegradability (OECD 301B): readily biodegradable

Ready biodegradability (OECD 301B): readily biodegradable

Inherent biodegradability (OECD 302C): inherently biodegradable

SCAS test: soluble organic carbon removal: 99.9%

11345808

Revised on: 20-Apr-2013 / v 6.3

Date of printing: 26-FEB-2014

Product: 962191 - MUSCENONE DELTA

F1000001.902191-100300



This Safety Data Sheet cancels and replaces all preceding SDS for this product.

13 DISPOSAL CONSIDERATIONS

Residual quantities of the product should be treated according to the instructions given under points 6, 7 and 8 above. Wastes should be eliminated according to national or regional regulatory requirements currently in force.

Minimize release to the environment.

14 TRANSPORT INFORMATION

In case of accidental spillage or fire during transport, refer to instructions given under points 5, 6, 7 and 8 above.

14.1 UNO

UN-No: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(METHYLCYCLOPENTADECENONE)

Class: 9
Packing Group: III

Hazardous to the Environment

14.2 Land transport (ADR/RID)

UN-No: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(METHYLCYCLOPENTADECENONE)

Class: 9
Packing group: III

14.3 Sea transport (IMDG-Code)

UN-No: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(METHYLCYCLOPENTADECENONE)

Class: 9 Packing group: III

Marine pollutant

14.4 Air transport (ICAO-IATA)

UN-No: 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

(METHYLCYCLOPENTADECENONE)

Class: 9 Packing group: III

11345808

15 REGULATORY INFORMATION

Reference: GB

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

Revised on: 20-Apr-2013 / v 6.3

Date of printing: 26-FEB-2014

Product: 962191 - MUSCENONE DELTA

Page 7 / 9



This Safety Data Sheet cancels and replaces all preceding SDS for this product.

EU Regulations

No relevant information available at this time.

15.2 Chemical Safety Assessment

No data available at this time.

16 OTHER INFORMATION

16.1 Revisions

01-Dec-2010: Version 6.1 - First version validated for publication 04-May-2012: Version 6.2 - Updates to sections 1, 2, 3, 8.3, 11, 12, 16. 20-Apr-2013: Version 6.3 - Updates to sections 1, 2, 3, 6, 8.1, 14, 16.

16.2 Key literature references

RIFM database **OECD SIDS EU IUCLID**

Reference: GB

Supplier information

16.3 Full text of phrases used under section 2

S24	Avoid contact with skin.
S37	Wear suitable gloves.
S57	Use appropriate container to avoid environmental contamination.
S61	Avoid release to the environment. Pefer to special instructions/Sat

Avoid release to the environment. Refer to special instructions/Safety data 561

sheets.

H317 May cause an allergic skin reaction.

H410 Very toxic to aquatic life with long lasting effects.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

Avoid release to the environment. P273

Contaminated work clothing should not be allowed out of the workplace. P272 Wear protective gloves/protective clothing/eye protection/face protection. P280

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention. P333+P313

P391 Collect spillage.

P363 Wash contaminated clothing before reuse.

16.4 Full text of phrases used under section 3

11345808

H400 Very toxic to aquatic life.

H317 May cause an allergic skin reaction.

Very toxic to aquatic life with long lasting effects. H410

R43 May cause sensitization by skin contact.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Revised on: 20-Apr-2013 / v 6.3 Date of printing: 26-FEB-2014 Product: 962191 - MUSCENONE DELTA

8 / 9 Page



This Safety Data Sheet cancels and replaces all preceding SDS for this product.

We believe that the information contained herein is current as of the date of this Safety Data Sheet. Since the use of this information and the conditions of use of the product are not within the control of Firmenich, it is the user's obligation to determine conditions of safe use of the product.

Information contained in this document and related material is proprietary to Firmenich. Disclosure to third parties without the prior written consent of Firmenich except where required by applicable laws and regulations and/or reverse engineering are strictly prohibited.

Revised on: 20-Apr-2013 / v 6.3

Date of printing: 26-FEB-2014

Product : 962191 - MUSCENONE DELTA

Page 9 / 9

Reference: GB

11345808