

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

017979 F

PALISANDROL 017979 F

© Firmenich product

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

Fragrance ingredient for use in consumer products.

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

Firmenich UK Ltd Southall Hayes Road Middlesex UB2 5LZ UNITED KINGDOM Tel: +44 208 843 61 11

GRS.EU.FRAGRANCE.EXPERTS@firmenich.com

1.4 Emergency telephone number

+44 1235 239 670 Available 24/7 (NCEC)

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2020, SI 2020/1567 (GB CLP)

Skin Sensitization - Cat. 1 H317 Environmental Hazard (chronic) - Cat. 3 H412

Additional information

Full text of listed statements: See section 16

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2.2 Label elements

Reference: GB

Hazard pictograms:

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Signal Word:

Warning

Hazard Statements:

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements:

P261 Avoid breathing mist/vapours.

P272 Contaminated work clothing should not be allowed out of the workplace.

P273 Avoid release to the environment.

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

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

P391 Collect spillage.

Supplemental Hazard information (EU):

Contains: Eugenol, Caryophyllene, Trimethylcyclohexylhexanol.

Hazard Inducers:

Cyclohexanepropanol, 2,2,6-trimethyl-.alpha.-propyl-

3a,7-Methano-3aH-cyclopentacycloocten-3-ol, decahydro-1,1,7-trimethyl-, formate

2.3 Other hazards

No data available at this time.

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Mixture of aromatic substances.

Contains: GHS Classification:

>= 20.0 < 30.0% Environmental Hazard (chronic) - Cat. 3 [H412]

EU Specific Identifiers:

N° EU REACH: 01-2119969275-26

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EC CAS: 0008050-15-5

Resin Acids And Rosin Acids, Hydrogenated, Me Esters

N° EINECS: 232-476-2

Reference: GB

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>= 15.0 < 20.0%

Skin Sensitization - Cat. 1B [H317]

EU Specific Identifiers:

N° EU REACH: 01-2120085416-52

Other Identifiers:

Cyclohexanepropanol, 2,2,6-Trimethyl-. Alpha.-Propyl-

N° CAS: 0070788-30-6

>= 5.0 < 7.5%

Environmental Hazard (chronic) - Cat. 2 [H411]

EU Specific Identifiers: EC CAS: 0058096-47-2

3a,7-Methano-3ah-Cyclopentacycloocten-3-Ol,

Decahydro-1,1,7-Trimethyl-, Formate

N° EINECS: 261-118-8

>= 0.1 < 0.5%

EU Specific Identifiers:

N° EU REACH: 01-2120745237-53

EC CAS: 0000087-44-5

Bicyclo[7.2.0]Undec-4-Ene, 4,11,11-Trimethyl-8-

Methylene-, [1r-(1r*,4e,9s*)]-N° EINECS: 201-746-1

>= 0.1 < 0.5%

EU Specific Identifiers:

EC CAS: 0000097-53-0

Eugenol

N° EINECS: 202-589-1

Aspiration Hazard - Cat. 1 [H304]

Skin Sensitization - Cat. 1B [H317]

Skin Sensitization - Cat. 1B [H317]

Eye Irritation - Cat.2 [H319]

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:

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Reference: GB

Rinse mouth with water. Obtain medical advice immediately.

4.2 Most important symptoms and effects, both acute and delayed

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No information available on the product itself.

4.3 Indication of immediate medical attention and special treatment needed None known.

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.

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

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

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

Reference: GB

7.1 Precautions for safe handling

Avoid contact with skin and eyes.

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Wear adequate protective gloves protection and eye/face protection.

No smoking. Avoid any sources of ignition.

Avoid exposing to high temperature during processing.

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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.

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.

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

8.1 Control parameters

Contains no substances with occupational exposure limit values

Derived No Effect Level (DNEL)

No data available

Predicted No Effect Concentration (PNEC)

No data available

8.2 Exposure controls

Avoid exposing to high temperature during processing.

Maintain adequate local and general ventilation where product is handled.

Appropriate engineering controls

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

Environmental exposure controls

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

Personal protection

Reference: GB

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

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Hand protection: Use chemical resistant gloves classified under Standard EN 374: Protective gloves against chemicals. Preferred glove barrier materials: Neoprene and Nitrile. When prolonged or frequently repeated contact may occur, a glove with a protection class of 4 or higher (breakthrough time greater than 120 minutes according to EN 374) is recommended. When only brief contact is expected, a glove with a protection class of 1 or higher (breakthrough time greater than 10 minutes according to EN 374) is recommended. Thickness > or = 0.2 mm.

NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

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

LIQUID Appearance:

Colour: **COLOURLESS TO 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): $> 40^{\circ}C$ Flash point (closed cup): > 100°C Evaporation rate: Not available Flammability (solid/gas): Not applicable

Explosive properties (St class): N/A

Vapour pressure (Pa): Not applicable Vapour density: Not available Relative density (d 20/20): 1.041 - 1.051 Water solubility (20°C): Not applicable Partition coef. (n-octanol/water): Not applicable Auto-ignition temperature (°C): Not available

Not available Decomposition temperature: Viscosity: Not available Explosive properties: Not available Oxidizing properties: Not available

9.2 Other safety information

None

Reference: GB

10 STABILITY AND REACTIVITY

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10.1 Reactivity

No reaction known with water.

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

11.1 Information on toxicological effects

This mixture has not been subjected to toxicological testing as an entity. According to available data on the constituents the health classification criteria are met.

(a) acute toxicity

Calculated LD50 Oral: LD50 > 2000 mg/kg bw

(b) skin corrosion/irritation

Not applicable

(c) serious eye damage/irritation

Not applicable

(d) respiratory or skin sensitisation

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Skin Sensitization - Cat. 1

(e) germ cell mutagenicity

Not applicable

(f) carcinogenicity

Not applicable

Reference: GB

(g) reproductive toxicity

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Not applicable

(h) STOT-single exposure Not applicable

(i) STOT-repeated exposure Not applicable

(j) aspiration hazard Not applicable

12 ECOLOGICAL INFORMATION

This mixture has not been subjected to ecotoxicological testing as an entity. According to available data on the constituents the environmental classification criteria are met.

12.1 Toxicity

Environmental Hazard (chronic) - Cat. 3

12.2 Persistence and degradability No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil No data available

12.5 Results of PBT and vPvB assessment Not applicable

12.6 Other adverse effects No data available

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: when being disposed of in its unused and uncontaminated state should be treated as a hazardous waste according to EC Directive 2008/98/EC. Any disposal practices must be in compliance with all national and provincial laws and any municipal or local by-laws governing hazardous waste.

Contaminated packaging: for used, contaminated and residual materials additional evaluations may be required.

Do not dump into any sewers, on the ground, or into any body of water.

14 TRANSPORT INFORMATION

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

UNO

| Not regulated |
|---------------|
| |

14.2 Proper Shipping Name:N/A14.3 Class:----14.4 Packing Group:---14.5 Environmental hazards:No

Land transport (ADR/RID)

| 14.1 UN-No: | Not regulated |
|-------------|---------------|
|-------------|---------------|

14.2 Proper Shipping Name:N/A14.3 Class:----14.4 Packing Group:---14.5 Environmental hazards:No

14.6 Special precautions for user: Refer to section 7
14.7 Transport in bulk according to Annex II of Marpol Not applicable

and the IBC Code:

Sea transport (IMDG-Code)

| 14.1 UN-No: | Not regulated |
|-------------|---------------|
| | |

14.2 Proper Shipping Name:N/A14.3 Class:----14.4 Packing Group:---14.5 Environmental hazards:No

Sea segregation group:

14.6 Special precautions for user:

14.7 Transport in bulk according to Annex II of Marpol

Not applicable

and the IBC Code:

Air transport (ICAO-IATA)

14.1 UN-No: Not regulated

14.2 Proper Shipping Name: N/A
14.3 Class: ---14.4 Packing Group: ---

14.5 Environmental hazards: Not applicable
14.6 Special precautions for user: Refer to section 7
14.7 Transport in bulk according to Annex II of Marpol
Not applicable

and the IBC Code:

Reference: GB

15 REGULATORY INFORMATION

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

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European Regulations

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

15.2 Chemical Safety Assessment

No data available at this time

16 OTHER INFORMATION

Revisions

March-2021: Version 10 - Updates to sections 1, 2, 3, 8, 9, 11, 12, 14, 15, 16

Key literature references

RIFM database

REACH

Supplier information

Full text of phrases used under section 2

| H317 | May cauca an | allergic skin reaction. |
|-------|-----------------|--------------------------|
| 11317 | iviav cause aii | alleruic Skill Teachion. |

H412 Harmful to aquatic life with long lasting effects.

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.

P391 Collect spillage.

P363 Wash contaminated clothing before reuse.

Full text of phrases used under section 3

H304 May be fatal if swallowed and enters airways.

H317 May cause an allergic skin reaction.

H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

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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.

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