

Firmenich

GHS Safety Data Sheet - CLP

According to Regulation (EC) No 2015 / 830

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

978880

RHUBOFIX®

© Firmenich product

EU Specific Identifiers:

EU REACH No: 01-2120085380-59

Other Identifiers:

CAS No: 41816-03-9

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 Grasse SAS
Parc Industriel Les Bois de Grasse
106 Avenue Louison Bobet
06130 Grasse
FRANCE
Tel: +33 (0)4 93 70 80 80

GRS.EU.FRAGRANCE.EXPERTS@firmenich.com

1.4 Emergency telephone number

+44 1235 239 670 Available 24/7 (NCEC)
ORFILA (INRS) number : + 33 (0)1 45 42 59 59
24 hours a day, 7 days a week

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Environmental Hazard (chronic) - Cat. 2

H411

Additional information

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Full text of listed statements : See section 16

2.2 Label elements

Hazard pictograms:



Signal Word:

-

Hazard Statements:

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P273 Avoid release to the environment.
P391 Collect spillage.

Hazard Inducers:

Spiro[1,4-methanonaphthalene-2(1H),2'-oxirane], 3,4,4a,5,8,8a-hexahydro-3',7-dimethyl-

2.3 Other hazards

No data available at this time.

3 COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance

Chemical substance.

Contains :

>= 99.0 <= 100.0%

EU Specific Identifiers:

N° EU REACH: 01-2120085380-59

Other Identifiers:

Spiro[1,4-Methanonaphthalene-2(1h),2'-Oxirane],

3,4,4a,5,8,8a-Hexahydro-3',7-Dimethyl-

N° CAS: 0041816-03-9

GHS Classification:

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

4 FIRST-AID MEASURES

4.1 Description of first aid measures

General information:

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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.

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.

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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.

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 general 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)

DNEL Worker (dermal), systemic effects - long-term, = 3.09 mg/kg bw/day

DNEL Worker (inhalation), systemic effects - long-term, = 10.9 mg/m³

DNEL Consumer (oral), systemic effects - long-term, = 1.11 mg/kg bw/day

DNEL Consumer (inhalation), systemic effects - long-term, = 1.92 mg/m³

DNEL Consumer (dermal), systemic effects - long-term, = 1.11 mg/kg bw/day

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Predicted No Effect Concentration (PNEC)

PNEC Aqua (freshwater) = 0.002 mg/l
PNEC Aqua (marine water) = 0 mg/l
PNEC Water (intermittent release) freshwater = 0.018 mg/l
PNEC Water (intermittent release) marine water = 0.002 mg/l
PNEC Sediment (freshwater) = 0.175 mg/kg sediment dw
PNEC Sediment (marine water) = 0.018 mg/kg sediment dw
PNEC STP = 4.46 mg/l
PNEC Soil = 0.05 mg/kg soil dw
PNEC Air No hazard identified.
PNEC Oral (secondary poisoning) No potential for bioaccumulation

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

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

Personal protection

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

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 = 0,2mm.

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

Appearance :	LIQUID
Colour :	COLOURLESS

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Odour :	Characteristic strong odour according to the commercial description of the substance.
pH :	Not available
Melting point/range (°C) :	< -20 °C (OECD 102)
Initial boiling point/range (°C) :	= 281 °C at 97.1kPa (OECD 103)
Flash point (closed cup) :	> 100°C
Evaporation rate :	Not available
Flammability (solid/gas) :	Not applicable
Explosive properties (St class) :	N/A
Vapour pressure (Pa) :	VP = 0.716 Pa at 25°C (OECD 104)
Vapour density :	Not available
Relative density (d 20/20) :	= 1.011 at 20°C (OECD 109)
Water solubility (20°C) :	QSAR - = 21.56 - 276.1 mg/l at 25°C (QSAR-WS)
Partition coef. (n-octanol/water) :	QSAR - Log Kow = 2.45 - 3.85 (QSAR-LogKow)
Auto-ignition temperature (°C) :	= 260 °C at 99.8 to 100.5kPa (Method A15)
Decomposition temperature :	Not available
Viscosity :	Not available
Explosive properties :	Not available
Oxidizing properties :	Not available

9.2 Other safety information

None

10 STABILITY AND REACTIVITY

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

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11.1 Information on toxicological effects

(a) acute toxicity

Acute oral toxicity (Rat, Gavage): LD50 = 3100 mg/kg

Acute dermal toxicity (Rabbit, Occlusive): LD50 > 2000 mg/kg

(b) skin corrosion/irritation

Primary Skin irritation (OECD 404 modified) (Rabbit, Occlusive): Non irritant

(c) serious eye damage/irritation

Acute Eye irritation (Rabbit, No washout): Non irritant

(d) respiratory or skin sensitisation

Guinea pig Maximisation test (OECD 406): Non-sensitising to skin

(e) germ cell mutagenicity

Bacterial Reverse Mutation test (Ames) (Salmonella + E. Coli, OECD 471, With and without S9, 5 strains): Non mutagenic

In vitro mammalian cell gene mutation test (Chinese hamster, V79 cells, OECD 476): Non mutagenic

In vitro Mammalian Cell Micronucleus Test (Human, OECD 487, With and without S9): Non mutagenic

(f) carcinogenicity

No data available

(g) reproductive toxicity

Combined Repeat. Dose Tox. & Reprod./Develop. Tox. Screening (Rat, OECD 422, Dietary, 28 day(s)):

NOAEL = 663 mg/kg/day (Males)

NOAEL (fertility) = 760 mg/kg/day

NOAEL (development) = 760 mg/kg/day

(h) STOT-single exposure

No data available

(i) STOT-repeated exposure

No data available

(j) aspiration hazard

No data available

12 ECOLOGICAL INFORMATION

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12.1 Toxicity

QSAR - Alga, Growth Inhibition Test (ECOSAR): 96 h EC50 = 2.18 mg/l

QSAR - Daphnia sp. Acute Immobilisation Test and Reproduction Test (ECOSAR): 48h EC50 = 2.92 mg/l

QSAR - Fish, Acute Toxicity Test (ECOSAR): 96h LC50 = 2.35 mg/l

Activated Sludge, Respiration Inhibition Test (OECD 209):

3h EC50 = 214 mg/l

3h NOEC = 30.6 mg/l

12.2 Persistence and degradability

Ready Biodegradation - Closed Bottle Test (OECD 301D, Sludge): Non readily biodegradable (4% in 28 day(s))

Stability as a fonction of pH: Unstable

12.3 Bioaccumulative potential

QSAR - Log Kow = 2.45 - 3.85 (QSAR-LogKow)

12.4 Mobility in soil

QSAR - Adsorption coefficient: Log Koc = 2.099 - 2.964

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

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

UNO

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14.1 UN-No: 3082
14.2 Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (RHUBOFIX)
14.3 Class: 9
14.4 Packing Group: III
14.5 Environmental hazards: Yes

Land transport (ADR/RID)

14.1 UN-No: 3082
14.2 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (RHUBOFIX)
14.3 Class: 9
14.4 Packing Group: III
14.5 Environmental hazards: Yes
14.6 Special precautions for user: Refer to section 7
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable

Sea transport (IMDG-Code)

14.1 UN-No: 3082
14.2 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (RHUBOFIX)
14.3 Class: 9
14.4 Packing Group: III
14.5 Environmental hazards: Yes
Marine pollutant: Yes
Sea segregation group: Not applicable
14.6 Special precautions for user: Refer to section 7
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code: Not applicable

Air transport (ICAO-IATA)

14.1 UN-No: 3082
14.2 Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (RHUBOFIX)
14.3 Class: 9
14.4 Packing Group: III
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 and the IBC Code: Not applicable

15 REGULATORY INFORMATION

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

If there are no Exposure Scenarios included as an annex in this safety data sheet one of the following justification applies:

- The substance is registered in quantities lower than 10 tonnes/year and then no obligation to carry out a Chemical Safety Assessment (CSA) and prepare a Chemical Safety Report (CSR),

Or

- The substance is registered as an onsite isolated or transported isolated intermediate and then the registration dossier do not need to include a Chemical Safety Report (CSR),

Or

- The substance does not meet the criteria of article 14.4.

Or

- The substance is a notified substance under Directive 67/548/EEC (NONS).

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

H411 Toxic to aquatic life with long lasting effects.

P273 Avoid release to the environment.

P391 Collect spillage.

Full text of phrases used under section 3

H411 Toxic 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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