

Firmenich

GHS Safety Data Sheet

According to Regulation ST/SG/AC.10/30/Rev.8 UN GHS

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

943020

FLOREX®

© Firmenich product

CAS No: 69486-14-2
EC No: 434-290-9
EU REACH No: 01-0000018044-78

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 Asia Private Ltd
No 10 Tuas West Road
Singapore 638377
SINGAPORE
Tel: +(65) 6347 2888

GRS.Fragrance.FIRSIN@firmenich.com

1.4 Emergency telephone number

+65 3158 1074 NCEC - Available 24/7

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation ST/SG/AC.10/30/Rev.8 [UN/GHS]

Acute Toxicity (oral) - Cat. 4	H302
Environmental Hazard (acute) - Cat. 2	H401
Environmental Hazard (chronic) - Cat. 2	H411

2.1.2 Additional information

Full text of listed statements : See section 16

2.2 Label elements

Hazard pictograms:

Firmenich

GHS Safety Data Sheet

According to Regulation ST/SG/AC.10/30/Rev.8 UN GHS

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



Signal Word:

Warning

Hazard Statements:

H302 Harmful if swallowed.
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P330 Rinse mouth.
P391 Collect spillage.

2.3 Other hazards

No data available at this time.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical substance.

Contains :

>= 99.0 <= 100.0%
5,8-Methano-2h-1-Benzopyran-2-One, 6-Ethylideneoctahydro-
N° CAS : 0069486-14-2
N° ELINCS: 434-290-9
N° EU REACH: 01-0000018044-78

GHS Classification:

Acute Toxicity (oral) - Cat. 4 [H302]
Environmental Hazard (chronic) - Cat. 2 [H411]
Environmental Hazard (acute) - Cat. 2 [H401]

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:

Firmenich

GHS Safety Data Sheet

According to Regulation ST/SG/AC.10/30/Rev.8 UN GHS

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

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.

6.3 Methods and material for containment and cleaning up

For containment:

Firmenich

GHS Safety Data Sheet

According to Regulation ST/SG/AC.10/30/Rev.8 UN GHS

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

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 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)

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.

8.2.1 Appropriate engineering controls

Firmenich

GHS Safety Data Sheet

According to Regulation ST/SG/AC.10/30/Rev.8 UN GHS

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

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
Odour :	Characteristic strong odour according to the commercial description of the substance.
pH :	Not available
Melting point/range (°C) :	= -14.5 °C (Method A1)
Initial boiling point/range (°C) :	= 332.9 °C (Method A2)
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 = 0.015 Pa at 25°C (Method A4)
Vapour density :	Not available
Relative density (d 20/20) :	= 1.11 at 20°C (Method A3)
Water solubility (20°C) :	= 1870 mg/l at 20°C (Method A6)
Partition coef. (n-octanol/water) :	Log Kow = 2.29 (Method A8)
Auto-ignition temperature (°C) :	= 340 °C at 100.14 - 100.81kPa (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

Firmenich

GHS Safety Data Sheet

According to Regulation ST/SG/AC.10/30/Rev.8 UN GHS

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

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

(a) acute toxicity

Acute oral toxicity (Rat, Gavage): LD50 > 200 - 2000

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

(b) skin corrosion/irritation

Primary Skin irritation (OECD 404 modified) (Rabbit, Semi-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 Vivo Mammalian Erythrocyte Micronucleus Test (Mouse, OECD 474, Gavage): Non mutagenic

Unscheduled DNA Synthesis UDS with Mamm. Liver Cells in vivo (Rat, OECD 486): Negative for UDS

In vitro Mammalian Chromosome Aberration Test (Human, OECD 473): Chromosomal aberration observed

(f) carcinogenicity

No data available

(g) reproductive toxicity

Firmenich

GHS Safety Data Sheet

According to Regulation ST/SG/AC.10/30/Rev.8 UN GHS

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

No data available

(h) STOT-single exposure
No data available

(i) STOT-repeated exposure
Repeated Dose 28-Day Oral Toxicity Study in Rodents (Rat, OECD 407, Gavage):
NOEL = 15 mg/kg/day
NOAEL = 1000 mg/kg/day

(j) aspiration hazard
No data available

12 ECOLOGICAL INFORMATION

12.1 Toxicity

Alga, Growth Inhibition Test (*Scenedesmus subspicatus*, OECD 201):

72 h ErC50 = 55 mg/l (Based on time Weighted average concentrations)

72 h NOEC = 21 mg/l (Based on time Weighted average concentrations)

Daphnia sp. Acute Immobilisation Test (OECD 202, Static): 48h EC50 = 5.7 mg/l (Based on nominal concentrations)

Fish, Acute Toxicity Test (Rainbow trout (*Oncorhynchus Mykiss*), OECD 203, Semi-static): 96h

LC50 = 12 mg/l (Based on nominal concentrations)

Activated Sludge, Respiration Inhibition Test (OECD 209):

3h EC50 = 440 mg/l

3h NOEC = 100 mg/l

12.2 Persistence and degradability

Ready Biodegradation - Closed Bottle Test (OECD 301D, Sludge): Non readily biodegradable (25% in 28 day(s))

Hydrolysis as a Function of pH (Method C7): Estimated Half-life at pH7 = 62.6 day(s)

12.3 Bioaccumulative potential

Log Kow = 2.29 (Method A8)

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

Firmenich

GHS Safety Data Sheet

According to Regulation ST/SG/AC.10/30/Rev.8 UN GHS

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

Product: The product should be handled according to the instructions given under sections 6, 7 and 8. Dispose of according to local or national regulations. The product should not be allowed to enter drains or the environment

Contaminated packaging: Empty packaging should be disposed according to local or national regulations by an approved waste handling

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

14.1 UN-No:	3082
14.2 Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s. (ETHYLIDENOXATRICYCLO-UNDECANONE)
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. (ETHYLIDENOXATRICYCLO-UNDECANONE)
14.3 Class:	9
14.4 Packing Group:	III
14.5 Environmental hazards:	Yes
14.6 Special precautions for user:	Refer to section 7

Sea transport (IMDG-Code)

14.1 UN-No:	3082
14.2 Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (ETHYLIDENOXATRICYCLO-UNDECANONE)
14.3 Class:	9
14.4 Packing Group:	III
14.5 Environmental hazards:	Yes
Marine pollutant:	Yes
14.6 Special precautions for user:	Refer to section 7
14.7 Maritime transport in bulk according to IMO instruments:	Not applicable

Firmenich

GHS Safety Data Sheet

According to Regulation ST/SG/AC.10/30/Rev.8 UN GHS

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

Air transport (ICAO-IATA)

14.1 UN-No:	3082
14.2 Proper Shipping Name:	Environmentally hazardous substance, liquid, n.o.s. (ETHYLIDENOXATRICYCLO-UNDECANONE)
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 Maritime transport in bulk according to IMO instruments:	Not applicable

15 REGULATORY INFORMATION

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

No relevant information available at this time.

15.2 Chemical Safety Assessment

No data available at this time.

16 OTHER INFORMATION

16.1 Revisions

March-2023 : Version 12 - Updates to sections 1, 2, 3 ,8 ,9, 11, 12, 14, 15, 16

16.2 Key literature references

RIFM database
OECD SIDS
EU IUCLID
Supplier information

16.3 Full text of phrases used under section 2

H302	Harmful if swallowed.
H411	Toxic to aquatic life with long lasting effects.
P264	Wash thoroughly after handling.
P273	Avoid release to the environment.
P270	Do not eat, drink or smoke when using this product.
P391	Collect spillage.
P330	Rinse mouth.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

16.4 Full text of phrases used under section 3

Firmenich

GHS Safety Data Sheet

According to Regulation ST/SG/AC.10/30/Rev.8 UN GHS

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

H302	Harmful if swallowed.
H401	Toxic to aquatic life.
H411	Toxic to aquatic life with long lasting effects.

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.