

Firmenich

GHS Safety Data Sheet - US

According to Regulation HCS 2012

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

937470

DAMASCONE ALPHA 937470

© Firmenich product

CAS No: 24720-09-0

EC No: 246-430-4

REACH No: 01-2120105799-47

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 Incorporated

250 Plainsboro Road

Princeton

New Jersey 08536

USA

Tel: +1 609 452 10 00

PSRA.Fragrance.Firinc@firmenich.com

1.4 Emergency telephone number

FOR INFORMATION OR IN AN EMERGENCY CALL NCEC @ +1 866 928 0789 (TOLL FREE) OR +1 215 207 0061.

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to Regulation HCS 2012

Acute Toxicity (oral) - Cat. 4

H302

Skin Sensitization - Cat. 1B

H317

Environmental Hazard (chronic) - Cat. 2

H411

Additional information

Full text of listed statements : See section 16

2.2 Label elements

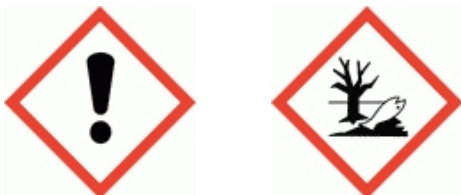
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Hazard pictograms:



Signal Word:

Warning

Hazard Statements:

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P261	Avoid breathing mist/vapours.
P264	Wash thoroughly after handling.
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.

2.3 Other hazards

No data available at this time.

3 COMPOSITION/INFORMATION ON INGREDIENTS

The exact percentage (concentration) of composition has been withheld as a trade secret.

3.1 Substance

Chemical substance.

Contains :

$\geq 90.0 < 99.0\%$
2-Buten-1-One, 1-(2,6,6-Trimethyl-2-Cyclohexen-1-yl)-, (2e)-
N° CAS : 0024720-09-0
N° EINECS: 246-430-4
N° EU REACH: 01-2120105799-47

GHS Classification:

Skin Sensitization - Cat. 1B [H317]
Acute Toxicity (oral) - Cat. 4 [H302]
Environmental Hazard (chronic) - Cat. 2 [H411]

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$\geq 1.0 < 2.5\%$
2-Buten-1-One, 1-(2,6,6-Trimethyl-3-Cyclohexen-1-Yl)-
N° CAS : 0057378-68-4
N° EINECS: 275-156-8

Skin Sensitization - Cat. 1A [H317]
Acute Toxicity (oral) - Cat. 4 [H302]
Skin Irritation - Cat. 2 [H315]
Environmental Hazard (acute) - Cat. 1 [H400]
Environmental Hazard (chronic) - Cat. 1 [H410]

$\geq 1.0 < 2.5\%$
2-Buten-1-One, 1-(2,6,6-Trimethyl-1-Cyclohexen-1-Yl)-, (2e)-
N° CAS : 0023726-91-2
N° EINECS: 245-842-1

Skin Sensitization - Cat. 1B [H317]
Skin Irritation - Cat. 2 [H315]
Environmental Hazard (chronic) - Cat. 2 [H411]

$0 < 0.1\%$
2-Buten-1-One, 1-(2,6,6-Trimethyl-1,3-Cyclohexadien-1-Yl)-
N° CAS : 0023696-85-7
N° EINECS: 245-844-2

Skin Sensitization - Cat. 1A [H317]
Skin Irritation - Cat. 2 [H315]
Environmental Hazard (chronic) - Cat. 2 [H411]

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:

In the event of contact with the eyes, irrigate with water for at least 15 minutes; obtain medical advice if irritation persists.

In case of inhalation:

In the event of exposure to vapors, immediately remove from the area to a fresh air environment.

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:

In the event of accidental ingestion, rinse mouth with water. Give up to one tumbler (half pint) of milk or water.

Obtain medical advice immediately.

Do not induce vomiting, 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.

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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.

Use standard procedures and preferred extinguishing media as stated below.

Extinguishing media: Foam, carbon dioxide or dry chemical.

5.2 Special hazard arising from the substance or mixture

None.

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:

Gloves impervious to the chemical substance 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:

Small spills can be wiped up with a cloth or paper. Standard absorbents can be used (saw dust, sand, vermiculite). Wear rubber gloves. Avoid contact with skin. If skin contact occurs, wash liberally with soap and water.

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 gloves impervious to the chemical substance 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.

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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, = 0.78 mg/kg bw/day

Worker (dermal), systemic effects - acute, No hazard identified.

Worker (dermal), local effects - acute & long-term, Medium hazard (no threshold derived)

Worker (eyes), No hazard identified.

DNEL Worker (inhalation), systemic effects - long-term, = 2.74 mg/m³

Worker (inhalation), systemic effects - acute, mg/m³ No hazard identified.

Worker (inhalation), local effects - acute & long-term, mg/m³ No hazard identified.

DNEL Consumer (oral), systemic effects - long-term, = 0.39 mg/kg bw/day

DNEL Consumer (inhalation), systemic effects - long-term, = 0.67 mg/m³

Consumer (inhalation), systemic effects - acute, mg/m³ No hazard identified.

Consumer (inhalation), local effects - acute & long-term, mg/m³ No hazard identified.

Consumer (eyes), No hazard identified.

DNEL Consumer (dermal), systemic effects - long-term, = 0.39 mg/kg bw/day

Consumer (dermal), systemic effects - acute, No hazard identified.

Consumer (dermal), local effects - acute & long-term, No hazard identified.

Predicted No Effect Concentration (PNEC)

PNEC Aqua (freshwater) = 0.658 µg/l

PNEC Aqua (marine water) = 0.066 µg/l

PNEC Water (intermittent release) = 6.58 µg/l

PNEC Sediment (freshwater) = 0.064 mg/kg sediment dw

PNEC Sediment (marine water) = 0.0064 mg/kg sediment dw

PNEC STP = 3.2 mg/l

PNEC Soil = 0.012 mg/kg soil dw

Air No hazard identified.

PNEC Oral (secondary poisoning) = 6.67 mg/kg food

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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: None required; avoid breathing vapors.
Hand protection: Gloves impervious to the chemical substance 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 PALE YELLOW
Odour :	Characteristic strong odour according to the commercial description of the substance.
pH :	Not available
Melting point/range (°C) :	= 4 °C (OECD 102)
Initial boiling point/range :	= 150 °C (OECD 103)
Flash point (closed cup) :	> 212 Fahrenheit (> 100 Centigrade)
Evaporation rate :	Not available
Flammability (solid/gas) :	Not applicable
Explosive properties (St class) :	N/A
Vapor pressure (At 20°C in mm Hg) :	< 0.1 mm
Vapour density :	Not available
Relative density (d 20/20) :	= 0.935 at 20°C (OECD 109)
Water solubility (20°C) :	= 140 mg/l at 20°C (OECD 105)
Partition coef. (n-octanol/water) :	Log Kow = 3.66 (OECD 123)
Auto-ignition temperature (°C) :	= 265 °C at 992-998.4hPa (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

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10.1 Reactivity

No reaction known with water.

10.2 Chemical stability

Presents no significant reactivity hazard. Normally stable even at elevated temperatures and pressures. Avoid temperatures above or near to the flash point. Not pyrophoric nor reactive with water. Does not undergo explosive decomposition, is shock stable, and is not an oxygen donor. Does not form explosive mixtures with other organic materials. Will not undergo hazardous exothermic polymerization.

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

Avoid strong oxidizing agents.

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 = 1670 mg/kg

Acute dermal toxicity (Rat, OECD 402, Open to air): LD50 = 2900 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): Non irritant

(d) respiratory or skin sensitisation

Local Lymph Node Assay (LLNA) OECD 429: 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

Data on analogue - In vitro mammalian cell gene mutation test (Chinese hamster, CHO-K1 cells, OECD 476, With and without S9): Non mutagenic

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(f) carcinogenicity
No data available

(g) reproductive toxicity
Data on analogue - Prenatal development toxicity study (Rat, OECD 414, Gavage, 13 day(s)):
NOAEL (maternal) = 100 mg/kg/day
NOAEL (development) = 400 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

12.1 Toxicity

Alga, Growth Inhibition Test (*Raphidocelis subcapitata*, OECD 201, Static):

72 h ErC50 = 4.56 mg/l (Based on nominal concentrations)

72 h NOEC = 0.768 mg/l (Based on nominal concentrations)

Daphnia sp. Acute Immobilisation Test (OECD 202, Semi-static): 48h EC50 = 2.37 mg/l (Based on nominal concentrations)

Fish, Acute Toxicity Test (*Oryzias latipes*, OECD 203, Semi-static): 96h LC50 = 0.628 mg/l (Based on time weighted average concentrations)

Data on analogue - Activated Sludge, Respiration Inhibition Test (OECD 209, Static):

3h EC50 = 275 mg/l

3h NOEC = 32 mg/l

12.2 Persistence and degradability

Ready Biodegradation - Closed Bottle Test (301D Screening): Readily biodegradable (63% in 28 day(s))

12.3 Bioaccumulative potential

Bioconcentration, Flow-through Fish Test (OECD 305, *Cyprinus carpio*): BCF = 8.4 - 20 L/kg,

Log Kow = 3.66 (OECD 123)

12.4 Mobility in soil

Adsorption coefficient (OECD 121): Log Koc = 2.8526 - 3.1452

12.5 Results of PBT and vPvB assessment

Not applicable

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12.6 Other adverse effects
No data available

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

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

UN-No: 3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (DAMASCONE ALPHA)
Class: 9
Packing Group: III
Hazardous to the Environment

Land transport (ADR/RID)

UN-No: 3082
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DAMASCONE ALPHA)
Class: 9
Packing group: III

Sea transport (IMDG-Code)

UN-No: 3082
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (DAMASCONE ALPHA)
Class: 9
Packing group: III
Marine pollutant

Air transport (ICAO-IATA)

UN-No: 3082
Proper Shipping Name: Environmentally hazardous substance, liquid, n.o.s. (DAMASCONE ALPHA)
Class: 9
Packing group: III

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15 REGULATORY INFORMATION

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

This chemical is NOT subject to reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 29 CFR Part 1910.1200.

15.2 Chemical Safety Assessment

No data available at this time.

16 OTHER INFORMATION

Revisions

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

Key literature references

RIFM database
OECD SIDS
EU IUCLID
Supplier information

Full text of phrases used under section 2

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash thoroughly after handling.
P273	Avoid release to the environment.
P272	Contaminated work clothing should not be allowed out of the workplace.
P270	Do not eat, drink or smoke when using this product.
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.
P330	Rinse mouth.
P301+P312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P363	Wash contaminated clothing before reuse.

Full text of phrases used under section 3

H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
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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