

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

920375
CARDAMOM ABS
© Firmenich product

CAS No: 8000-66-6
EC No: 288-922-1

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

Ingredient for use in products that may be ingested and/or fragrance ingredient for use in consumer product.
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

John Carey
Firmenich Inc.
250 Plainsboro Road
Princeton - New Jersey 08536 - USA
john.carey@firmenich.com
Tel.: +1.609.452.1000

1.4 Emergency telephone number

FOR INFORMATION OR IN AN EMERGENCY CALL NCEC @ +1 215 207 0061.

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

According to Regulation HCS 2012

Flammable Liquid - Cat. 4	H227
Skin Irritation - Cat. 2	H315
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

Hazard pictograms:

Firmenich

GHS Safety Data Sheet - US

According to Regulation HCS 2012

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



Signal Word:

Warning

Hazard Statements:

H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H227 Combustible liquid
H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements:

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P261 Avoid breathing mist/vapours.
P264 Wash thoroughly after handling.
P302+P352 IF ON SKIN: Wash with plenty of soap and water.
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P403+P235 Store in a well-ventilated place. Keep cool.

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

Natural product.

Contains :

>= 30.0 < 40.0%
2-Oxabicyclo[2.2.2]Octane, 1,3,3-Trimethyl-
N° CAS : 0000470-82-6
N° EINECS: 207-431-5

GHS Classification:

Skin Sensitization - Cat. 1B [H317]
Flammable Liquid - Cat. 3 [H226]

Firmenich

GHS Safety Data Sheet - US

According to Regulation HCS 2012

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

<p>>= 5.0 < 7.5% 1,6-Octadien-3-Ol, 3,7-Dimethyl-, 3-Acetate N° CAS : 0000115-95-7 N° EINECS: 204-116-4</p>	<p>Skin Sensitization - Cat. 1B [H317] Skin Irritation - Cat. 2 [H315] Eye Irritation - Cat.2B [H320] Flammable Liquid - Cat. 4 [H227]</p>
<p>>=2.5 < 5.0% Linalool N° CAS : 0000078-70-6 N° EINECS: 201-134-4</p>	<p>Skin Sensitization - Cat. 1B [H317] Skin Irritation - Cat. 2 [H315] Eye Irritation - Cat.2A [H319] Flammable Liquid - Cat. 4 [H227]</p>
<p>>= 1.0 < 2.5% Limonene N° CAS : 0000138-86-3 N° EINECS: 205-341-0</p>	<p>Aspiration Hazard - Cat. 1 [H304] Skin Sensitization - Cat. 1B [H317] Skin Irritation - Cat. 2 [H315] Environmental Hazard (acute) - Cat. 1 [H400] Environmental Hazard (chronic) - Cat. 1 [H410] Flammable Liquid - Cat. 3 [H226]</p>
<p>>= 1.0 < 2.5% 2,6-Octadien-1-Ol, 3,7-Dimethyl-, Acetate, (E)- N° CAS : 0000105-87-3 N° EINECS: 203-341-5</p>	<p>Skin Sensitization - Cat. 1 [H317] Skin Irritation - Cat. 2 [H315] Environmental Hazard (chronic) - Cat. 3 [H412]</p>
<p>>= 1.0 < 2.5% 1,6,10-Dodecatrien-3-Ol, 3,7,11-Trimethyl- N° CAS : 0007212-44-4 N° EINECS: 230-597-5</p>	<p>Skin Sensitization - Cat. 1B [H317] Eye Irritation - Cat.2B [H320] Environmental Hazard (acute) - Cat. 1 [H400] Environmental Hazard (chronic) - Cat. 1 [H410]</p>
<p>>= 1.0 < 2.5% Ethanol N° CAS : 0000064-17-5 N° EINECS: 200-578-6</p>	<p>Eye Irritation - Cat.2A [H319] Flammable Liquid - Cat. 2 [H225]</p>
<p>>= 1.0 < 2.5% Bicyclo[3.1.1]Hept-2-Ene, 2,6,6-Trimethyl- N° CAS : 0000080-56-8 N° EINECS: 201-291-9</p>	<p>Aspiration Hazard - Cat. 1 [H304] Skin Sensitization - Cat. 1B [H317] Acute Toxicity (oral) - Cat. 4 [H302] Skin Irritation - Cat. 2 [H315] Environmental Hazard (acute) - Cat. 1 [H400] Environmental Hazard (chronic) - Cat. 1 [H410] Flammable Liquid - Cat. 3 [H226]</p>

Firmenich

GHS Safety Data Sheet - US

According to Regulation HCS 2012

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

<p>>= 1.0 < 2.5% Bicyclo[3.1.1]Heptane, 6,6-Dimethyl-2-Methylene- N° CAS : 0000127-91-3 N° EINECS: 204-872-5</p>	<p>Aspiration Hazard - Cat. 1 [H304] Skin Sensitization - Cat. 1B [H317] Skin Irritation - Cat. 2 [H315] Environmental Hazard (acute) - Cat. 1 [H400] Environmental Hazard (chronic) - Cat. 1 [H410] Flammable Liquid - Cat. 3 [H226]</p>
<p>>= 0.5 < 1.0% 2,6-Octadien-1-ol, 3,7-Dimethyl-, (E)- N° CAS : 0000106-24-1 N° EINECS: 203-377-1</p>	<p>Eye Damage - Cat.1 [H318] Skin Sensitization - Cat. 1 [H317] Skin Irritation - Cat. 2 [H315]</p>
<p>>= 0.5 < 1.0% Citral N° CAS : 0005392-40-5 N° EINECS: 226-394-6</p>	<p>Skin Sensitization - Cat. 1 [H317] Skin Irritation - Cat. 2 [H315] Eye Irritation - Cat.2A [H319]</p>
<p>>= 0.1 < 0.5% 2,6,10-Dodecatrien-1-ol, 3,7,11-Trimethyl- N° CAS : 0004602-84-0 N° EINECS: 225-004-1</p>	<p>Skin Sensitization - Cat. 1B [H317] Skin Irritation - Cat. 2 [H315] Environmental Hazard (acute) - Cat. 1 [H400] Environmental Hazard (chronic) - Cat. 1 [H410]</p>

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.

Firmenich

GHS Safety Data Sheet - US

According to Regulation HCS 2012

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

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.

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:

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:

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.

Vapors may cause vomiting and nausea. In case of insufficient ventilation, wear appropriate respiratory protection.

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.

Firmenich

GHS Safety Data Sheet - US

According to Regulation HCS 2012

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

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

0000064-17-5 : ETHANOL
US ACGIH Threshold Limit Values Data
US. ACGIH Threshold Limit Values
Occupational Exposure Limit data. Short Term Exposure Limit (STEL): 1000 ppm

0000064-17-5 : ETHYL ALCOHOL
US NIOSH Pocket Guide to Chemical Hazards Data
US. NIOSH: Pocket Guide to Chemical Hazards
Occupational Exposure Limit data. Recommended exposure limit (REL): 1000 ppm
Occupational Exposure Limit data. Recommended exposure limit (REL): 1900 mg/m³

0000064-17-5 : ETHYL ALCOHOL
US OSHA Table Z-1 Data
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
Occupational Exposure Limit data. Permissible exposure limit: 1000 ppm
Occupational Exposure Limit data. Permissible exposure limit: 1900 mg/m³

0000064-17-5 : ETHYL ALCOHOL
US OSHA Table Z-1-A Data
US. OSHA Table Z-1-A (29 CFR 1910.1000)
Occupational Exposure Limit data. Time Weighted Average (TWA): 1000 ppm
Occupational Exposure Limit data. Time Weighted Average (TWA): 1900 mg/m³

Firmenich

GHS Safety Data Sheet - US

According to Regulation HCS 2012

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

000080-56-8 : TURPENTINE AND SELECTED MONOTERPENES

US ACGIH Threshold Limit Values Data

US. ACGIH Threshold Limit Values

Occupational Exposure Limit data. Time Weighted Average (TWA): 20 ppm

000127-91-3 : TURPENTINE AND SELECTED MONOTERPENES

US ACGIH Threshold Limit Values Data

US. ACGIH Threshold Limit Values

Occupational Exposure Limit data. Time Weighted Average (TWA): 20 ppm

000138-86-3 : D-LIMONENE

US WEEL Guides Data

US. OARS. WEELs Workplace Environmental Exposure Level Guide

Occupational Exposure Limit data. Time Weighted Average (TWA): 165.5 mg/m³

Occupational Exposure Limit data. Time Weighted Average (TWA): 30 ppm

0005392-40-5 : CITRAL, INHALABLE FRACTION AND VAPOR

US ACGIH Threshold Limit Values Data

US. ACGIH Threshold Limit Values

Occupational Exposure Limit data. Time Weighted Average (TWA): 5 ppm

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

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

Personal protection

Respiratory protection: Breathing of the vapors or dust particles may be hazardous. In the absence of appropriate engineering controls such as spot ventilation, ventilated enclosures, etc., workers should avail themselves of the appropriate NIOSH approved respiratory protection.

Hand protection: Adequate and Impervious 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

Firmenich

GHS Safety Data Sheet - US

According to Regulation HCS 2012

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

9.1 Information on basic physical and chemical properties

Appearance :	LIQUID
Colour :	PALE YELLOW TO ORANGE
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) :	= 162 Fahrenheit (= 72 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
Vapour density :	Not available
Relative density (d 20/20) :	0.91 - 0.98
Water solubility (20°C) :	Not available
Partition coef. (n-octanol/water) :	Not available
Auto-ignition temperature (°C) :	Not available
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

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.

Firmenich

GHS Safety Data Sheet - US

According to Regulation HCS 2012

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

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

RIFM Monograph : Food Cosmetics Toxicology (1974), vol.12, p.837

LD50 (oral, rat) (OECD 401 : limit) : > 5000 mg/kg

LD50 (dermal, rabbit) (OECD 402) : > 5000 mg/kg

Irritation (dermal) (mice & swine) : non irritant @ 100%

Irritation (Human max.) : non irritant @ 4%

Sensitization (Human max.) : non sensitizing @ 4%

Phototoxicity (mice & swine) : non phototoxic @ 100%

(a) acute toxicity
No data available

(b) skin corrosion/irritation
No data available

(c) serious eye damage/irritation
No data available

(d) respiratory or skin sensitisation
No data available

(e) germ cell mutagenicity
No data available

(f) carcinogenicity
No data available

(g) reproductive toxicity
No data available

(h) STOT-single exposure
No data available

(i) STOT-repeated exposure
No data available

(j) aspiration hazard
No data available

Firmenich

GHS Safety Data Sheet - US

According to Regulation HCS 2012

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

12 ECOLOGICAL INFORMATION

12.1 Toxicity

No data available

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: 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. (LIMONENE)
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. (LIMONENE)

Firmenich

GHS Safety Data Sheet - US

According to Regulation HCS 2012

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

Class: 9
Packing group: III

Sea transport (IMDG-Code)

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

Air transport (ICAO-IATA)

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

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

Jun-2019 : Version 9.0 - 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

H227 Combustible liquid
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H411 Toxic to aquatic life with long lasting effects.

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Firmenich

GHS Safety Data Sheet - US

According to Regulation HCS 2012

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

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.
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.
P370+P378	In case of fire: Use appropriate fire extinguishers for fire control.
P391	Collect spillage.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P403+P235	Store in a well-ventilated place. Keep cool.

Full text of phrases used under section 3

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H227	Combustible liquid
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H320	Causes eye irritation.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful 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.