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

922051 CEDARWOOD SUPER RECT © Firmenich product

CAS No:	8000-27-9
EC No:	285-370-3
REACH No:	01-2120744063-63

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

John Carey

Firmenich Inc. P.O. Box 5880 Princeton - New Jersey 08543 - 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

Aspiration Hazard - Cat. 1 Environmental Hazard (acute) - Cat. 1 Environmental Hazard (chronic) - Cat. 1

Additional information

Full text of listed statements : See section 16

2.2 Label elements

Hazard pictograms:

H304 H400

H410

According to Regulation HCS 2012

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



Signal Word: Danger

Hazard Statements:

H304	May be fatal if swallowed and enters airways.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary Statements:

P273	Avoid release to the environment.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P331	Do NOT induce vomiting.
P391	Collect spillage.
P405	Store locked up.

2.3 Other hazards

No data available at this time.

<u>3 COMPOSITION/INFORMATION ON INGREDIENTS</u>

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

3.1 Substance

Natural product.

<u>Contains :</u> >= 20.0 < 30.0% 1h-3a,7-Methanoazulene, 2,3,4,7,8,8a-Hexahydro-3,6,8,8-Tetramethyl-, [3r-(3.Alpha.,3a.Beta.,7.Beta.,8a.Alpha.)]-N° CAS : 0000469-61-4 N° EINECS: 207-418-4 <u>GHS Classification:</u> Aspiration Hazard - Cat. 1 [H304] Environmental Hazard (acute) - Cat. 1 [H400] Environmental Hazard (chronic) - Cat. 1 [H410]

According to Regulation HCS 2012

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

>= 20.0 < 30.0% 1h-3a,7-Methanoazulen-6-Ol, Octahydro-3,6,8,8-Tetramethyl-, [3r-(3.Alpha.,3a.Beta.,6.Alpha.,7.Beta.,8a.Alpha.)]-N° CAS : 0000077-53-2 N° EINECS: 201-035-6 Environmental Hazard (chronic) - Cat. 2 [H411] Flammable Liquid - Cat. 4 [H227]

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 advise immediately.

Do not induce vomiting, obtain medical advise immediately.

- <u>4.2 Most important symptoms and effects, both acute and delayed</u> No specific data available.
- <u>4.3 Indication of immediate medical attention and special treatment needed</u> 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.

According to Regulation HCS 2012

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

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.

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 generals rules for compatibility storage.

7.3 Specific end use(s)

According to Regulation HCS 2012

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

Not available at this time.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Not applicable

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: 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

9.1 Information on basic physical and chemical properties

Colour : Col	LIQUID COULD CRYSTALLIZE COLOURLESS TO PALE YELLOW Characteristic strong odour according to the commercial description of the substance.
Melting point/range (°C) :Initial boiling point/range (°C) :Initial boiling point/range (°C) :Initial boiling point/range (°C) :Flash point (closed cup) :Evaporation rate :Evaporation rate :Initial boiling point/range (°C) :Flammability (solid/gas) :Initial boiling point/range (°C) :Upper/lower flammability or explosive limits :Initial boiling point/range (°C) :Vapor pressure (At 20°C in mm Hg) :Initial boiling point/range (°C) :Vapour density :Initial boiling point/range (°C) :Water solubility (20°C) :Initial boiling point/range (°C):	Not available Not available Not available > 212 Fahrenheit (> 100 Centigrade) Not available Not applicable N/A < 0.1 mm Not available 0.95 - 0.97 Not available Not available Not available Not available Not available Not available

According to Regulation HCS 2012

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

Viscosity : Explosive properties : Oxidizing properties : Not available Not available 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.

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 > 5000 mg/kg
Acute dermal toxicity (Rabbit, OECD 402): LD50 > 5000 mg/kg

 (b) skin corrosion/irritation
In vitro Skin Corrosion - Human skin model (OECD 431): Not Corrosive
Not Corrosive
In vitro Skin irritation (OECD 439): Irritant

According to Regulation HCS 2012

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

(c) serious eye damage/irritation In vitro Bovine corneal opacity and permeability (BCOP) test (OECD 437): 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 In Vivo Mammalian Erythrocyte Micronucleus Test (Mouse, OECD 474, Dermal): Non mutagenic In vitro Mammalian Cell Gene Mutation Tests Using the Thymidine Kinase Gene (OECD 490, 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 < 207 mg/kg/day

NOAEL (fertility) > 381 mg/kg/day NOAEL (fertility) > 560 mg/kg/day NOAEL (development) = 207 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 : 72 h EL50 = 2.9 mg/l Daphnia sp. Acute Immobilisation Test and Reproduction Test (OECD 202, Static): 48h EL50 = 1.3 mg/l Activated Sludge, Respiration Inhibition Test (OECD 209): 3h EC50 > 1620 mg/l 3h EC10 = 301 mg/l

12.2 Persistence and degradability Ready Biodegradation - Manometric Respirometry Test (OECD 301F, Sludge): Ultimately biodegradable (58% in 28 day(s))

According to Regulation HCS 2012

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

12.3 Bioaccumulative potential Log Kow = 4.33 - 7.02 (QSAR-LogKow)

12.4 Mobility in soil Adsorption coefficient (OECD 121): Log Koc = 1.74 - 5.61

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

Reference : US 16824838		Revised on : 24 Ju Date of printing :
Class:	9	
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S CEDRENE)	S. (ALPHA
UN-No:	3082	
Sea transport (IMDG-Code)		
Packing group:	III	
Class:	CEDRENE) 9	
Proper Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S	S. (ALPHA
UN-No:	3082	
Land transport (ADR/RID)		
Proper Shipping Name: Class: Packing Group:	Environmentally hazardous substance, liquid, n.o.s. (ALPHA CEDR 9 III Hazardous to the Environment	RENE)
UN-No:	3082	

According to Regulation HCS 2012

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

Packing group: III Marine pollutant

Air transport (ICAO-IATA)

UN-No:3082Proper Shipping Name:Environmentally hazardous substance, liquid, n.o.s. (ALPHA CEDRENE)Class:9Packing 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 Amendements 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-2018 : Version 8.0 - Updates to sections 2, 8, 9, 11, 12

Key literature references RIFM database OECD SIDS EU IUCLID Supplier information

Full text of phrases used under section 2

H304	May be fatal if swallowed and enters airways.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
P273	Avoid release to the environment.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P391	Collect spillage.
P331	Do NOT induce vomiting.
P405	Store locked up.

Full text of phrases used under section 3

H227	Combustible liquid
H304	May be fatal if swallowed and enters airways.
H400	Very toxic to aquatic life.

According to Regulation HCS 2012

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

H410	Very toxic to aquatic life with long lasting effects.
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.

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