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

920000 CASCALONE® 920000 © Firmenich product

CAS No:	950919-28-5
EC No:	
REACH No:	01-2120749830-51

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. 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 @ +1 866 928 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
Specific Target Organ Toxicity - Single Exposure - Cat. 3 Narcotic Effects	H336
Environmental Hazard (chronic) - Cat. 3	H412

Additional information

Full text of listed statements : See section 16

2.2 Label elements

According to Regulation HCS 2012

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

Hazard pictograms:



Signal Word: Warning

Hazard Statements:

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements:

P261	Avoid breathing dust.
P264	Wash thoroughly after handling.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

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.

<u>Contains :</u> >= 99.0 <= 100.0% 2h-1,5-Benzodioxepin-3 (4h)-One, 7-(1-Methylethyl)-N° CAS : 0950919-28-5 N° ELINCS: --N° REACH: 01-2120749830-51 <u>GHS Classification:</u> Skin Sensitization - Cat. 1B [H317] Acute Toxicity (oral) - Cat. 4 [H302] Specific Target Organ Toxicity - Single Exposure -Cat. 3 Narcotic Effects [H336] Environmental Hazard (chronic) - Cat. 3 [H412]

4 FIRST-AID MEASURES

According to Regulation HCS 2012

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

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: Water, foam, carbon dioxide or dry chemical.

5.2 Special hazard arising from the substance or mixture

Product is a combustible powder. Like all combustible powders, it may form explosive mixtures if suspended in air.

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 dust.

Individual washing routines should be followed after any potential contact.

According to Regulation HCS 2012

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

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 swept up and disposed of properly.

Do not allow powder to accumulate on horizontal surfaces, as an explosive dust/air mixture could occur if suddenly dispersed into the air.

For cleaning-up:

Spillages should be disposed of in accordance with Governmental Regulations.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep strict control of dust accumulation to a minimum.

Avoid contact with skin and eyes.

Wear gloves impervious to the chemical substance and eye/face protection.

No smoking. Avoid any source of ignition. Use flameproof electrical equipment and spark-reduced tools.

Ensure that all equipments are properly bonding and earthing.

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)

Not available at this time.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Contains no substances with occupational exposure limit values

According to Regulation HCS 2012

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

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. OSHA has established limits for Respirable dust (PEL of 5 mg/m3) TWA and Total dust (PEL of 15 mg/m3)TWA. It is recommended that when using powders that air monitoring of the workplace be conducted to ensure that these levels are not exceeded.

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 : Colour : Odour :	POWDER WHITE TO YELLOW Characteristic strong odour according to the commercial description of the substance.
pH : Melting point/range (°C) : Initial boiling point/range (°C) : Flash point (closed cup) : Evaporation rate : Flammability (solid/gas) : Explosive properties (St class) : Vapor pressure (At 20°C in mm Hg) : Vapour density : Relative density (d 20/20) : Water solubility (20°C) :	Not applicable = $34.8 \degree C$ (OECD 102) = $267 \degree C$ at 95.4 kPa (OECD 103) > 212 Fahrenheit (> 100 Centigrade) Not available Not applicable N/A < 0.1 mm Not available $1.119 \text{ at } 40\degree C$ (OECD 109) = 2557 mg/l at $20\degree C$ (OECD 105)
	5 ()

According to Regulation HCS 2012

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

Partition coef. (n-octanol/water) : Auto-ignition temperature (°C) : Decomposition temperature : Viscosity : Oxidizing properties : Log Kow = 2.46 (OECD 117) = 400 °C at 101.79 to 102.18kPa (Method A15) Not available Not available Not available

9.2 Other safety information

9.2.1 Explosive properties (Measured)

No data available at this time.

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, OECD 420, Gavage): LD50 > 300 - 2000 mg/kg Acute dermal toxicity (Rat, OECD 402, Semi-occlusive): LD50 > 2000 mg/kg

According to Regulation HCS 2012

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

(b) skin corrosion/irritation Primary Skin irritation (Rabbit, OECD 404, Semi-occlusive): Mild irritant

(c) serious eye damage/irritation Acute Eye irritation (Rabbit, OECD 405, No washout): 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 vitro Mammalian Chromosome Aberration Test (Human, OECD 473): No chromosomal aberration

(f) carcinogenicity No data available

(g) reproductive toxicity 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):
 NOAEL = 300 mg/kg/day
 NOEL = 30 mg/kg/day

(j) aspiration hazard No data available

12 ECOLOGICAL INFORMATION

12.1 Toxicity
Alga, Growth Inhibition Test (Pseudokirchneriella subcapitata, OECD 201, Static): 72 h ErC50 = 87 mg/l (Based on average measured concentrations) 72 h NOEC = 7.1 mg/l (Based on average measured concentrations)
Daphnia sp. Acute Immobilisation Test and Reproduction Test (OECD 202, Semi-static): 48h EC50
> 100 mg/l (Based on nominal concentrations)
Fish, Acute Toxicity Test (Zebra fish, OECD 203, Semi-static): 96h LC50 = 53.7 mg/l (Based on average measured concentrations)
Activated Sludge, Respiration Inhibition Test (OECD 209): 3h EC50 = 390 mg/l 3h NOEC = 190 mg/l

12.2 Persistence and degradability

According to Regulation HCS 2012

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

Ready Biodegradation - Manometric Respirometry Test (OECD 301F, Sludge): Non readily biodegradable (0% in 28 day(s))

12.3 Bioaccumulative potential Log Kow = 2.46 (OECD 117)

12.4 Mobility in soil Adsorption coefficient (OECD 121): Log Koc = 1.91

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: Proper Shipping Name:	Not regulated N/A
Class:	
Packing Group:	

Land transport (ADR/RID)

UN-No:	Not regulated
Proper Shipping Name:	N/A
Class:	
Packing group:	

Sea transport (IMDG-Code)

UN-No:	Not regulated
Proper Shipping Name:	N/A
Class:	

According to Regulation HCS 2012

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

Packing group:

Air transport (ICAO-IATA)

UN-No:Not regulatedProper Shipping Name:N/AClass:----Packing group:---

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-2020 : Version 9.2 - 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 H317 H336 H412	Harmful if swallowed. May cause an allergic skin reaction. May cause drowsiness or dizziness. Harmful 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.
P271	Use only outdoors or in a well-ventilated area.
P272	Contaminated work clothing should not be allowed out of the workplace.
P270	Do no eat, drink or smoke when using this product.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

According to Regulation HCS 2012

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

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.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.

Full text of phrases used under section 3

H302	Harmful if swallowed.
H317	May cause an allergic skin reaction.
H336	May cause drowsiness or dizziness.
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.