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

000345 B CASSIS BASE © Firmenich product

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]

Flammable Liquid - Cat. 3	H226
Aspiration Hazard - Cat. 1	H304
Skin Irritation - Cat. 2	H315
Skin Sensitization - Cat. 1	H317
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:

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: Danger

Hazard Statements:

H304	May be fatal if swallowed and enters airways.
H226	Flammable liquid and vapour.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
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.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
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.

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

Mixture of aromatic substances.

<u>Contains :</u> >= 10.0 < 15.0% Cyclopentaneacetic Acid, 3-Oxo-2-Pentyl-, Methyl Ester N° CAS : 0024851-98-7 N° EINECS: 246-495-9 N° EU REACH: 01-2119493355-31 <u>GHS Classification:</u> Environmental Hazard (acute) - Cat. 3 [H402]

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.

>= 10.0 < 15.0% Beta-Pinene N° CAS : 0000127-91-3 N° EINECS: 242-060-2

>= 2.5 < 5.0% 6-Octen-1-OI, 3,7-Dimethyl-N° CAS : 0000106-22-9 N° EINECS: 203-375-0 N° EU REACH: 01-2119453995-23

>= 1.0 < 2.5% Spiro[1,4-Methanonaphthalene-2(1h),2'-Oxirane], 3,4,4a,5,8,8a-Hexahydro-3',7-Dimethyl-N° CAS : 0041816-03-9 N° ELINCS: --N° EU REACH: 01-2120085380-59

>= 1.0 < 2.5% Cyclopentanone, 2,2,5-Trimethyl-5-Pentyl-N° CAS : 0065443-14-3 N° EINECS: 265-779-3 N° EU REACH: 01-2120121429-60

>= 1.0 < 2.5% 3-Cyclohexene-1-Carboxaldehyde, 2,4-Dimethyl-N° CAS : 0068039-49-6 N° ELINCS: --N° EU REACH: 01-2119982384-28

>= 0.5 < 1.0% Alpha-Pinene N° CAS : 0000080-56-8 N° EINECS: 232-077-3

>= 0.1 < 0.5% Benzoic Acid, 2,4-Dihydroxy-3,6-Dimethyl-, Methyl Ester N° CAS : 0004707-47-5 N° EINECS: 225-193-0 N° EU REACH: 01-2120762759-36 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]

Skin Sensitization - Cat. 1B [H317] Skin Irritation - Cat. 2 [H315] Eye Irritation - Cat.2A [H319] Environmental Hazard (acute) - Cat. 2 [H401] Acute Toxicity (oral) - Cat. 5 [H303] Acute Toxicity (dermal) - Cat. 5 [H313]

Environmental Hazard (chronic) - Cat. 2 [H411] Environmental Hazard (acute) - Cat. 2 [H401] Acute Toxicity (oral) - Cat. 5 [H303]

Environmental Hazard (chronic) - Cat. 2 [H411] Environmental Hazard (acute) - Cat. 2 [H401] Flammable Liquid - Cat. 4 [H227]

Skin Sensitization - Cat. 1B [H317] Skin Irritation - Cat. 2 [H315] Environmental Hazard (chronic) - Cat. 2 [H411] Environmental Hazard (acute) - Cat. 2 [H401] Acute Toxicity (oral) - Cat. 5 [H303] Flammable Liquid - Cat. 4 [H227]

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]

Skin Sensitization - Cat. 1B [H317] Environmental Hazard (acute) - Cat. 2 [H401]

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.

>= 0.1 < 0.5% 1,6-Octadiene, 7-Methyl-3-Methylene-N° CAS : 0000123-35-3 N° EINECS: 204-622-5

>= 0.1 < 0.5% 4-Penten-1-One, 1-(5,5-Dimethyl-1-Cyclohexen-1-YI)-N° CAS : 0056973-85-4 N° EINECS: 260-486-7 N° EU REACH: 01-2120735847-42

>= 0.1 < 0.5% 2h-Pyran, Tetrahydro-4-Methyl-2-(2-Methyl-1-Propenyl)-N° CAS : 0016409-43-1 N° EINECS: 240-457-5 N° EU REACH: 01-2119976300-42 Aspiration Hazard - Cat. 1 [H304] Skin Irritation - Cat. 2 [H315] Eye Irritation - Cat.2A [H319] Environmental Hazard (acute) - Cat. 1 [H400] Environmental Hazard (chronic) - Cat. 2 [H411] Flammable Liquid - Cat. 3 [H226]

Skin Sensitization - Cat. 1B [H317] Environmental Hazard (chronic) - Cat. 2 [H411] Environmental Hazard (acute) - Cat. 2 [H401] Acute Toxicity (oral) - Cat. 5 [H303]

Reproductive Toxicity - Cat. 2 [H361] Skin Irritation - Cat. 2 [H315] Eye Irritation - Cat.2A [H319] Environmental Hazard (acute) - Cat. 3 [H402] Acute Toxicity (oral) - Cat. 5 [H303] Flammable Liquid - Cat. 4 [H227]

4 FIRST-AID MEASURES

<u>4.1 Description of first aid measures</u> General information: As in all cases of potential poisoning, Obtain medical advice immediately.

In case of eye contact: 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 information available on the product itself.
- 4.3 Indication of immediate medical attention and special treatment needed None known.

5 FIRE-FIGHTING MEASURES

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.

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:

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.

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.

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 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

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

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 : Colour : Odour : LIQUID COLOURLESS Characteristic strong odour according to the commercial description of the substance.

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.

pH : Melting point/range (°C) :
Initial boiling point/range (°C) :
Flash point (closed cup) :
Evaporation rate :
Flammability (solid/gas) :
Upper/lower flammability or explosive limits :
Vapour pressure (Pa) :
Vapour density :
Relative density (d 20/20) :
Water solubility (20°C) :
Partition coef. (n-octanol/water) :
Auto-ignition temperature (°C):
Decomposition temperature :
Viscosity :
Explosive properties :
Oxidizing properties :
51 11 11

Not available Not available Not available = 50°C Not available Not applicable N/A Not applicable Not available 1.006 - 1.016 Not applicable Not applicable Not available Not available 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 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

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.

This mixture has not been subjected to toxicological testing as an entity. According to available data on the constituents the health classification criteria are met.

(a) acute toxicity Calculated LD50 Oral: LD50 > 5000 mg/kg bw

(b) skin corrosion/irritation Skin Irritation - Cat. 2

(c) serious eye damage/irritation Not applicable

(d) respiratory or skin sensitisation Skin Sensitization - Cat. 1

(e) germ cell mutagenicity Not applicable

(f) carcinogenicity Not applicable

(g) reproductive toxicity Not applicable

(h) STOT-single exposure Not applicable

(i) STOT-repeated exposure Not applicable

(j) aspiration hazard Aspiration Hazard - Cat. 1

12 ECOLOGICAL INFORMATION

This mixture has not been subjected to ecotoxicological testing as an entity. According to available data on the constituents the environmental classification criteria are met.

12.1 Toxicity Environmental Hazard (acute) - Cat. 2 Environmental Hazard (chronic) - Cat. 2

12.2 Persistence and degradability No data available

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.

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

14.1 UN-No: 14.2 Proper Shipping Name: 14.3 Class: 14.4 Packing Group: 14.5 Environmental hazards:	1197 Extracts, liquid 3 III Yes
Land transport (ADR/RID)	
 14.1 UN-No: 14.2 Proper Shipping Name: 14.3 Class: 14.4 Packing Group: 14.5 Environmental hazards: 14.6 Special precautions for user: 	1197 EXTRACTS, LIQUID 3 III Yes Refer to section 7

Sea transport (IMDG-Code)

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.

14.1 UN-No: 14.2 Proper Shipping Name:	1197 EXTRACTS, LIQUID (BETA-PINENE)
14.3 Class:	3
14.4 Packing Group:	
14.5 Environmental	Yes
hazards:	
Marine pollutant:	Yes
14.6 Special precautions	Refer to section 7
for user:	
14.7 Maritime transport in bulk according to IMO instruments:	Not applicable

Air transport (ICAO-IATA)

14.1 UN-No:	1197
14.2 Proper Shipping	Extracts, liquid
Name:	
14.3 Class:	3
14.4 Packing Group:	III
14.5 Environmental	Not applicable
hazards:	
14.6 Special precautions	Refer to section 7
for user:	
14.7 Maritime transport in	Not applicable
bulk according to IMO	
instruments:	

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

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.

Supplier information

16.3 Full text of phrases used under section 2

H304 H226 H315 H317 H411	May be fatal if swallowed and enters airways. Flammable liquid and vapour. Causes skin irritation. May cause an allergic skin reaction. Toxic to aquatic life with long lasting effects.
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
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.
P240	Ground/bond container and receiving equipment.
P241	Use rated explosion-proof electrical equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P303+P361+P353	IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water/shower.
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.
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing and wash before reuse.
P363	Wash contaminated clothing before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P235	Keep cool.

16.4 Full text of phrases used under section 3

H226	Flammable liquid and vapour.
H227	Combustible liquid
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H361	Suspected of damaging fertility or the unborn child.
H400	Very toxic to aquatic life.
H401	Toxic to aquatic life.
H402	Harmful to aquatic life.

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.

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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