



SAFETY DATA SHEET (SDS)

Prepared in accordance with the Globally Harmonized System (GHS) and Regulation (EC) No. 1907/2006 (REACH, as amended)

LILYBELLE®

SECTION 1: IDENTIFICATION

1.1 Product Identifier

Parameter	Details
Product Name	Lilybelle®
Manufacturer	Symrise
Symrise Product No.	633687
CAS Number	1378867-81-2
EC Number	700-886-5
EU REACH Registration	01-2120042063-72
Molecular Formula	$C_{12}H_{20}O$
Molecular Weight	180 g/mol
Chemical Class	Aldehyde
Product Type	Synthetic / Renewable Fragrance Ingredient
Olfactive Family	Floral / Lily of the Valley

Symrise directly confirms Product No. 633687, CAS 1378867-81-2, REACH registration, formula and chemical identity.

1.2 Relevant Identified Uses

Professional fragrance ingredient for:

- Fine fragrance
- Lily-of-the-valley accords
- Muguet accords
- Cyclamen accords
- Green floral fragrances
- Watery and aquatic fragrances
- Ozonic compositions
- Powdery fragrances
- Personal care
- Shampoo and shower gel
- Soap
- Deodorants
- Body lotion



- Fabric softener
- Detergents
- Household cleaning products

Symrise Recommended Use Level: 0.1–5%

This is an olfactory formulation recommendation and not an IFRA maximum.

1.3 Uses Advised Against

- Internal consumption
- Direct undiluted skin use
- Pharmaceutical use without assessment
- Use as a finished consumer product
- Uncontrolled environmental release

1.4 Supplier

Aromology Trading LLC
G05 Al Ghazal Building
Nadd Al Hamar
Dubai, United Arab Emirates
Website: www.aromology.com
Email: info@aromology.com
Telephone: +971 505197601

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification

Available SDS documentation for Lilybelle®, CAS 1378867-81-2, classifies the substance as:

Hazard Class	Classification
Skin Corrosion / Irritation	Category 2
Skin Sensitisation	Category 1
Hazardous to Aquatic Environment – Chronic	Category 1

SIGNAL WORD

WARNING

HAZARD STATEMENTS

H315 – Causes skin irritation.
H317 – May cause an allergic skin reaction.
H410 – Very toxic to aquatic life with long lasting effects.



2.2 Pictograms

- GHS07 – Exclamation Mark
- GHS09 – Environment

2.3 Precautionary Statements

- P261 – Avoid breathing vapour or mist.
- P264 – Wash thoroughly after handling.
- P272 – Contaminated work clothing should not be allowed out of the workplace.
- P273 – Avoid release to the environment.
- P280 – Wear protective gloves and eye protection.
- P302+P352 – IF ON SKIN: Wash with plenty of water.
- P332+P313 – If skin irritation occurs: Get medical advice/attention.
- P333+P313 – If skin irritation or rash occurs: Get medical advice/attention.
- P362+P364 – Take off contaminated clothing and wash it before reuse.
- P391 – Collect spillage.
- P501 – Dispose of contents/container according to applicable regulations.

These precautions are consistent with the current Lilybelle SDS reviewed.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

Component	CAS No.	Specification
3-[(4R)-4-(Propan-2-yl)cyclohex-1-en-1-yl]propanal	1378867-81-2	Minimum 95% GC

The exact-substance SDS lists the chemical at 100% for hazard communication, while Symrise's commercial specification gives minimum 95% GC purity.

3.2 Additives

Parameter	Status
Stabilizer	Yes
Stabilizer Identity	Not disclosed in public Symrise technical sheet
Occurrence in Nature	No
Renewable Factor	83.3% – upcycled



SECTION 4: FIRST-AID MEASURES

4.1 Inhalation

- Move affected person to fresh air.
- Keep comfortable for breathing.
- If breathing is difficult, trained personnel may provide oxygen.
- Obtain medical attention if symptoms persist.

4.2 Skin Contact

- Remove contaminated clothing.
- Wash thoroughly with soap and water.
- Obtain medical advice if irritation or rash develops.
- Wash contaminated clothing before reuse.

4.3 Eye Contact

- Rinse immediately with plenty of clean water.
- Remove contact lenses if present and easy to do.
- Continue rinsing.
- Obtain medical advice if irritation persists.

4.4 Ingestion

- Rinse mouth.
- Do not induce vomiting.
- Contact a physician or poison centre.
- If vomiting occurs, keep the head low to reduce aspiration risk.

The reviewed Lilybelle SDS gives these first-aid principles and specifically notes skin irritation and allergic reaction as expected symptoms.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Suitable Extinguishing Media

Use:

- Water spray or fog
- Carbon dioxide
- Dry chemical
- Alcohol-resistant foam

5.2 Unsuitable Extinguishing Media



Do not use a solid high-pressure water stream, as it may spread burning material.

5.3 Fire Characteristics

Symrise specifies:

Flash Point: >100°C

A separate exact-substance SDS reports:

117.8°C – Closed Cup

Both values indicate a relatively high flash point.

5.4 Hazardous Combustion Products

Fire may generate:

- Carbon monoxide
- Carbon dioxide
- Irritating organic vapours
- Toxic or corrosive combustion gases

5.5 Firefighter Protection

Use standard protective equipment and self-contained breathing apparatus in enclosed areas. Prevent contaminated firefighting water from reaching drains or waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions

- Eliminate ignition sources.
- Ensure adequate ventilation.
- Avoid breathing vapour.
- Avoid skin contact.
- Wear suitable gloves and protective clothing.
- Keep unnecessary personnel away.

6.2 Environmental Precautions

Prevent entry into:

- Drains
- Sewers
- Surface water
- Groundwater



Because Lilybelle is classified as very toxic to aquatic life with long-lasting effects, spills should be contained promptly.

6.3 Cleanup

Absorb using:

- Dry sand
- Clay
- Diatomaceous earth
- Vermiculite
- Commercial chemical sorbent

Transfer collected material to appropriately labelled waste containers.

Do not return spilled material to the original container.

SECTION 7: HANDLING AND STORAGE

7.1 Safe Handling

- Use adequate ventilation.
- Avoid breathing vapour.
- Avoid skin and eye contact.
- Avoid prolonged exposure.
- Take precautions against static discharge.
- Ground bulk-transfer equipment where appropriate.
- Wash thoroughly after handling.

7.2 Storage

Store:

- In tightly closed containers
- Cool
- Dry
- In a well-ventilated location
- Away from incompatible materials
- Away from unnecessary heat

The exact-substance SDS recommends cool, ventilated storage and closed containers.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Occupational Exposure Limits

No specific occupational exposure limit was identified in the SDS reviewed.



8.2 Engineering Controls

Provide:

- Adequate general ventilation
- Local exhaust where vapour generation is significant
- Eyewash facilities
- Controlled bulk-transfer equipment

8.3 Personal Protective Equipment

Protection	Recommendation
Eyes	Safety glasses / chemical goggles
Hands	Chemical-resistant gloves, e.g. nitrile
Body	Protective work clothing
Respiratory	Suitable organic-vapour respirator where ventilation is inadequate

Because the substance is a skin sensitizer, avoiding repeated skin contact is particularly important.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Value
Appearance	Clear, colourless to light yellow liquid
Odour	Floral, lily of the valley, aldehydic, green, cyclamen
GC Purity	Minimum 95%
Molecular Formula	C ₁₂ H ₂₀ O
Molecular Weight	180 g/mol
Flash Point	>100 °C – Symrise specification
Boiling Point	250.7 °C – Symrise
Log P (Kow)	4.8
Relative Density	Approx. 0.925 at 20 °C
Specific Gravity	Approx. 0.92 at 25 °C
Vapour Pressure	Approx. 0.08 mmHg at 20 °C
Melting / Freezing Point	Approx. -75 °C
Water Solubility	Insoluble
Stabilizer	Yes
Occurrence in Nature	No
Renewable Factor	83.3% – upcycled
Biodegradability	63.0% – readily biodegradable
Chemical Class	Aldehyde



The official Symrise sheet supplies the product specifications and sustainability data; the exact-substance SDS supplies density, vapour pressure, freezing point and water-solubility data.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

Stable and non-reactive under normal recommended conditions.

10.2 Chemical Stability

Stable under normal storage conditions.

10.3 Hazardous Reactions

No dangerous reaction is known under normal use.

10.4 Conditions to Avoid

Avoid:

- Strong incompatible materials
- Unnecessary heating
- Prolonged uncontrolled exposure to air

10.5 Incompatible Materials

Strong oxidising agents.

10.6 Hazardous Decomposition Products

No hazardous decomposition products are expected under correct storage and handling; combustion may nevertheless generate irritating fumes.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Likely Routes of Exposure

- Skin
- Eyes
- Inhalation
- Accidental ingestion

11.2 Skin Irritation

Causes skin irritation.

11.3 Skin Sensitisation



May cause an allergic skin reaction.

11.4 Eye Effects

Direct contact may cause temporary irritation.

11.5 Acute Toxicity

The reviewed SDS states that complete acute toxicity data are not available.

11.6 Mutagenicity

Insufficient data for classification in the reviewed SDS.

11.7 Carcinogenicity

No classification could be established from available data; the substance is not listed in the cited IARC/OSHA/NTP carcinogen lists in that SDS.

11.8 Reproductive Toxicity

Insufficient data for classification.

11.9 STOT

Insufficient data for classification.

11.10 Aspiration Hazard

Insufficient data for classification.

A RIFM safety assessment has also been published specifically for CAS 1378867-81-2.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Very toxic to aquatic life with long-lasting effects.

Representative test results reported in the exact-substance SDS include:

Test	Result
Algae ErC50	5.93 mg/L / 48 h
Algae NOEC	1.16 mg/L / 72 h
Daphnia EC50	0.8 mg/L / 96 h
Daphnia EC10	0.0807 mg/L / 21 d

12.2 Biodegradability

Symrise reports:

63.0% – Readily biodegradable



12.3 Bioaccumulative Potential

Symrise reports:

Log P (Kow): 4.8

This indicates substantial lipophilic character.

12.4 Environmental Precautions

Avoid release into drains, waterways and soil.

SECTION 13: DISPOSAL CONSIDERATIONS

- Dispose according to local, regional and national requirements.
- Do not discharge into drains or watercourses.
- Dispose of contaminated absorbents appropriately.
- Empty containers may retain hazardous residue.
- Use an authorised waste-management facility.

SECTION 14: TRANSPORT INFORMATION

The exact Lilybelle SDS reviewed gives the following transport status:

ADR / RID / ADN

Parameter	Classification
UN Number	UN 3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Technical Name	3-[(4R)-4-(Propan-2-yl)cyclohex-1-en-1-yl]propanal
Class	9
Packing Group	III
Environmental Hazard	Yes

IMDG

Parameter	Classification
UN Number	UN 3082
Class	9
Packing Group	III



Marine Pollutant	Yes
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IATA

Not regulated as dangerous goods in the reviewed SDS.

US DOT

- Non-bulk: Not regulated as dangerous goods.
- Bulk: UN3082, Class 9, Packing Group III.

Transport regulations and exemptions can change; verify the latest regional Symrise SDS before shipment.

SECTION 15: REGULATORY INFORMATION

Relevant regulatory frameworks include:

- Regulation (EC) No. 1907/2006 – REACH
- Regulation (EC) No. 1272/2008 – CLP
- Regulation (EU) 2020/878
- Regulation (EC) No. 1223/2009 – Cosmetics
- Regulation (EU) 2023/1545 – fragrance-allergen labelling
- Current IFRA Standards
- Applicable national environmental and transport regulations

EU REACH Registration

01-2120042063-72

SECTION 16: OTHER INFORMATION

OLFACTIVE PROFILE

Symrise describes Lilybelle® as:

- Floral
- Lily of the valley
- Aldehydic
- Green
- Cyclamen
- Ozonic-green
- Watery



- Airy
- Transparent
- Fresh

It underlines lily-of-the-valley character, creates ozonic-green and lightly aqueous transparent accents, provides a green aldehydic lift to powdery notes and refreshes fragrance compositions overall.

SUSTAINABILITY

Lilybelle® is manufactured using D-limonene originating from an orange-juice-industry side stream. Symrise reports:

Renewable Factor: 83.3% – Upcycled

Biodegradability: 63.0% – Readily biodegradable

RECOMMENDED PERFUMERY USE: 0.1–5%

DISCLAIMER

This is a supplier-style Safety Data Sheet prepared using official Symrise Lilybelle® technical information and publicly available safety documentation for the exact chemical substance CAS 1378867-81-2.

It is not the original Symrise-issued SDS.

The technical identity, purity, physical properties, sustainability profile and recommended-use information are based primarily on Symrise documentation. Hazard, toxicological and transport details have been cross-checked against an SDS for the exact Lilybelle chemical identity.

For formal workplace hazard communication, regulatory submission or shipment, the latest original regional Symrise SDS for Product No. 633687 should take precedence.

Authorised by:
Fozia Khot
Director