



SAFETY DATA SHEET (SDS)

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

Zenolide

SECTION 1: IDENTIFICATION

Product Name: Zenolide

Chemical Name / Substance Name: Ethylene Dodecanedioate

CAS Number: 54982-83-1

EC Number: 259-423-6

Product Type: Aroma Chemical / Perfumery Raw Material

Recommended Use: Raw material for the manufacture of fragrances and/or flavourings

Supplier

Aromology Trading LLC

G05 Al Ghazal Building

Nadd Al Hamar

Dubai, United Arab Emirates

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SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification

Classification according to the Globally Harmonized System (GHS):

Hazard Classification	Category	Hazard Statement
Acute Toxicity – Oral	Category 5	H303
Aquatic Acute	Category 1	H400
Aquatic Chronic	Category 3	H412

The supplied SDS gives these classifications in Section 2.

2.2 Label Elements

SIGNAL WORD

WARNING



HAZARD STATEMENTS

H303 – May be harmful if swallowed.

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

PRECAUTIONARY STATEMENTS

P273 – Avoid release to the environment.

P312 – Call a POISON CENTER or doctor/physician if you feel unwell.

P391 – Collect spillage.

P501 – Dispose of contents/container according to local legislation.

2.3 Other Hazards

No additional hazards identified.

Note: The source SDS contains an internal inconsistency: Section 2.1 lists H400 and H412, while Section 2.2 prints H410. I have preserved the source information rather than silently changing it. Section 16 again lists H400 and H412.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

Chemical Name	CAS Number	EC Number	Concentration	GHS Classification
Ethylene Dodecanedioate	54982-83-1	259-423-6	≥50%	Acute Tox. 5 H303; Aquatic Acute 1 H400; Aquatic Chronic 3 H412

Substance / Mixture: Substance

3.2 Mixtures

Not Applicable

The source SDS identifies Ethylene Dodecanedioate at ≥50% and does not classify the product as a mixture.

SECTION 4: FIRST-AID MEASURES

Exposure	First-Aid Measures
Ingestion	Rinse mouth with water. Obtain medical advice. Keep at rest. Do not induce vomiting.
Eye Contact	Immediately rinse with plenty of water for at least 15 minutes and seek medical advice.
Inhalation	Remove person to fresh air and keep at rest. Seek immediate medical advice.
Skin	Immediately remove contaminated clothing. Wash affected skin thoroughly with soap



Exposure	First-Aid Measures
Contact	and water. Seek medical attention if symptoms persist.

Most Important Symptoms and Effects

No information available.

Immediate Medical Attention / Special Treatment

No information available.

SECTION 5: FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water Spray • Carbon Dioxide (CO₂) • Dry Chemical Powder • Appropriate Foam

Unsuitable Extinguishing Media

Do not use a full water jet.

Special Hazards

May emit toxic fumes under fire conditions.

High temperatures may lead to increased pressure inside closed containers.

Advice for Firefighters

Avoid inhalation of vapours generated during a fire.

Use appropriate respiratory protection.

Wear self-contained breathing apparatus and protective clothing.

Prevent firefighting runoff from entering drains or waterways.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions

Evacuate surrounding areas where necessary.

Ensure adequate ventilation.

Keep unnecessary and unprotected personnel away.

Avoid breathing vapour or spray.

Avoid contact with skin and eyes.

Use appropriate personal protective equipment.

Environmental Precautions

Do not discharge into:

Drains • Surface Waters • Groundwater



Containment and Cleaning

Cover spilled material with an inert, inorganic, non-combustible absorbent material such as:

Dry Lime • Sand • Soda Ash

Place recovered material in covered containers using non-sparking tools.

Remove material from the affected area.

Keep away from open flames and ignition sources.

Ventilate and wash the spill area after collection is complete.

SECTION 7: HANDLING AND STORAGE

7.1 Safe Handling

Do not store or handle near food or drinking water.

Do not smoke.

Avoid contact with:

Eyes • Skin • Clothing

Wear suitable protective clothing and eye protection.

Observe appropriate occupational safety and hygiene practices.

Keep in the original container or a container manufactured from a compatible material.

7.2 Storage

Store in:

Tightly Closed • Preferably Full Containers • Cool • Dry • Well-Ventilated Area • Protected From Light

Keep away from:

Hot Surfaces • Sparks • Flames • Static Discharge • Other Ignition Sources

Keep away from incompatible materials.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Occupational Exposure Limits

None Known

8.2 Exposure Controls

Provide adequate ventilation appropriate to the conditions of use.

Use mechanical exhaust ventilation where required.

Take appropriate measures to prevent splashing onto the body.

8.3 Personal Protective Equipment



Protection	Recommendation
Eye / Face Protection	Chemical safety goggles
Hand Protection	Chemical-resistant gloves
Body Protection	Appropriate protective equipment selected according to task and exposure risk
Respiratory Protection	Suitable respiratory equipment where ventilation is inadequate

Environmental emissions from ventilation or process equipment should be controlled in accordance with applicable environmental protection requirements.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance	Liquid / Solid
Colour	Conforms to Standard
Odour	Conforms to Standard
Odour Threshold	Not Determined
pH	Not Determined
Melting / Freezing Point	Approx. 16–19 °C
Boiling Point / Range	Not Determined
Flash Point	182 °C
Evaporation Rate	Not Determined
Flammability	Not Determined
Lower Explosive Limit	Not Determined
Upper Explosive Limit	Not Determined
Vapour Pressure	Not Determined
Vapour Density	Not Determined
Density @ 20 °C	1.055–1.065 g/mL
Relative Density @ 20 °C	1.055–1.065
Water Solubility	Insoluble in Water
Solubility in Ethanol	Soluble
Partition Coefficient	Not Determined
Auto-Ignition Temperature	Not Determined
Decomposition Temperature	Not Determined
Dynamic Viscosity	Not Determined
Kinematic Viscosity	Not Determined
Explosive Properties	Not Determined
Oxidising Properties	None Expected



These values are taken directly from Section 9 of the supplied SDS.

The 16–19°C melting/freezing range explains why Zenolide may appear as either a liquid or solid depending on storage temperature.

SECTION 10: STABILITY AND REACTIVITY

Parameter	Information
Reactivity	No hazardous reactions when stored and handled as prescribed
Chemical Stability	Stable under recommended storage and handling conditions
Possibility of Hazardous Reactions	No hazardous reactions expected under prescribed conditions
Conditions to Avoid	Excessive heat, flame and other ignition sources
Incompatible Materials	Strong acids, strong bases and oxidising agents
Hazardous Decomposition Products	Carbon monoxide and unidentified organic compounds may form during combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Toxicological Endpoint	Assessment
Acute Toxicity	May be harmful if swallowed
Skin Corrosion / Irritation	Classification criteria not met
Serious Eye Damage / Irritation	Classification criteria not met
Respiratory / Skin Sensitisation	Classification criteria not met
Germ Cell Mutagenicity	Classification criteria not met
Carcinogenicity	Classification criteria not met
Reproductive Toxicity	Classification criteria not met
STOT – Single Exposure	Classification criteria not met
STOT – Repeated Exposure	Classification criteria not met
Aspiration Hazard	Classification criteria not met

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Assessment: Very toxic to aquatic life with long lasting effects.

12.2 Persistence and Degradability

Biodegradation: 100% – OECD 301B

The product is readily biodegradable.

12.3 Bioaccumulative Potential

No information available.



12.4 Mobility in Soil

No information available.

12.5 Other Adverse Effects

Do not allow the material to enter wastewater or waterways.

The supplied SDS specifically reports **100% biodegradation under OECD 301B**.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of the material in accordance with applicable national and local environmental regulations.

Do not release into drains, surface waters or the environment.

SECTION 14: TRANSPORT INFORMATION

Transport Information	ADR/RID/ADN	IMDG	IATA/ICAO
UN Number	UN 3082	UN 3082	UN 3082
Proper Shipping Name	Environmentally Hazardous Substance, Liquid, N.O.S. (Ethylene Dodecanedioate)	Same	Same
Transport Hazard Class	9	9	9
Packing Group	III	III	III
Environmental Hazard	Yes	Yes	Yes

Special Precautions for User

None known.

Maritime Transport in Bulk

No information available.

The source SDS assigns UN 3082, Class 9, Packing Group III across ADR/RID/ADN, IMDG and IATA/ICAO.

SECTION 15: REGULATORY INFORMATION

Safety, Health and Environmental Regulations

No additional product-specific regulatory information is provided in the supplied SDS.

The underlying document states conformity with the requirements of the Globally Harmonized System (GHS).

SECTION 16: OTHER INFORMATION

FULL TEXT OF RELEVANT HAZARD STATEMENTS



H303 – May be harmful if swallowed.
H400 – Very toxic to aquatic life.
H412 – Harmful to aquatic life with long lasting effects.

DISCLAIMER

The information contained in this Safety Data Sheet is based on the available technical and safety information for the material and is intended as guidance for safe handling, storage, transportation and use.

This information describes applicable safety requirements and does not constitute a guarantee of specific product properties.

The user is responsible for determining suitability for the intended application and ensuring compliance with applicable local laws and regulations.

Authorised by:
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