

Safety Data Sheet

#56949197 · Full 16-section SDS

According to Regulation (EC) No 1907/2006

According to Regulation (EC) No 2020/878

PRODUCT	CAS NUMBER	FORMULA	VERSION	REVISION DATE
meso-Erythritol	149-32-6	C4H10O4	10	13 Oct 2026

SECTION 1

Identification

1.1 Product identifier

Product name meso-Erythritol

CAS number 149-32-6

EC / EINECS number 205-737-3

Chemical formula C4H10O4

Molecular weight 122.12

SMILES C([C@H])([C@H](CO)O)O)O

1.2 Relevant identified uses of the substance or mixture and uses advised against

For research and development. Laboratory chemicals. Manufacture of substances. Not suitable for human or veterinary purposes.

1.3 Details of the supplier of the safety data sheet

Molekula Limited
1 Millennium Way, Newton Aycliffe
Durham, DL5 6JW, United Kingdom
info@molekula.com · +44 (0) 3302 000333

1.4 Emergency telephone number

0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification

2.1 Classification of the substance or mixture

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008

2.2 Label elements

NONE

CODE	PRECAUTIONARY STATEMENT
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P280	Wear protective gloves/protective clothing/eye protection/face protection
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P405	Store locked up
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P501	Dispose of contents/container to an approved waste disposal plant
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2.3 Other hazards

Contains no PBT/vPvB components or endocrine disruptors at levels of 0.1% or higher

SECTION 3

Composition / information on ingredients

3.1 Substances

Name	meso-Erythritol
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CAS number	149-32-6
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EC number	205-737-3
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Concentration / purity	~100%
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Classification according to Regulation (EC) No 1272/2008	Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008
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Hazard statements	None
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Acute toxicity estimate (ATE)	No data available
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Impurities / stabilising additives	Not applicable
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SECTION 4

First-aid measures

4.1 Description of first aid measures

Inhalation	Move to fresh air.
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Skin contact	Take off immediately all contaminated clothing; rinse skin with water/shower.
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Eye contact	Rinse out with plenty of water; remove contact lenses.
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Ingestion	Make victim drink water (two glasses at most); consult doctor if feeling unwell.
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Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel. First aiders/ medical personnel need to protect themselves.

4.2 Most important symptoms and effects, both acute and delayed

Treat symptomatically.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5

Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Water, foam, carbon dioxide (CO₂), dry powder

Unsuitable extinguishing media No limitations of extinguishing agents are given

5.2 Special hazards arising from the substance or mixture

Combustible; carbon oxides and hazardous combustion gases or vapours possible in the event of fire

5.3 Advice for firefighters

Wear self-contained breathing apparatus; prevent fire extinguishing water from contaminating surface water or ground water.

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid inhalation of dusts; evacuate the danger area, observe emergency procedures, consult an expert.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and material for containment and cleaning up

Cover drains; take up dry, avoiding dust generation; dispose of properly and clean up affected area.

6.4 Reference to other sections

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

7.1 Precautions for safe handling

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature -15 to -20 °C

Conditions for safe storage (incompatibilities) Tightly closed, dry; recommended storage temperature -20 °C; storage class 11 (combustible solids)

7.3 Specific end use(s)

See Section 1.2.

SECTION 8

Exposure controls / personal protection**8.1 Control parameters**

Occupational exposure limits (OEL / WEL) *Not applicable*

DNEC/PNEC data *Not applicable*

8.2 Exposure controls

Eye / face protection Safety glasses
Wear eye/face protection as recommended. All eye/face protection should comply with EN ISO 16321-1:2022.

Skin / hand protection Gloves: Nitrile Rubber, 0.11mm (480 mins).

Respiratory protection Dust mask (FFP2/FFP3)
Keep self-contained breathing apparatus readily available for emergency use. Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided. Respiratory equipment: Reusable Air-Purifying Respirator (APR). Filter type: ABEK. Standard: EN 14387.

Other protection *No data available*

Environmental exposure controls Do not let product enter drains.

SECTION 9

Physical & chemical properties**9.1 Information on basic physical and chemical properties**

Appearance / physical state Solid
DERIVED FROM: LITERATURE

Colour White
DERIVED FROM: LITERATURE

Odour Odourless
DERIVED FROM: LITERATURE

Melting / freezing point 118 - 120 °C (lit.)
DERIVED FROM: LITERATURE

Boiling point 329 - 331 °C (lit.)
DERIVED FROM: LITERATURE

Flammability *No data available*

Lower and upper explosion limit *No data available*

Flash point *Not applicable*

Auto-ignition temperature ca. 440 °C
DERIVED FROM: LITERATURE

Decomposition temperature *No data available*

pH *No data available*

Acidity *Not applicable*

Kinematic viscosity	<i>No data available</i>
Solubility	<i>No data available</i>
Partition coefficient n-octanol/water (log value)	log Pow ca. -2.29 at 25 °C; bioaccumulation is not expected DERIVED FROM: LITERATURE
Vapour pressure	<i>No data available</i>
Density (g/mL)	1.451 g/mL DERIVED FROM: LITERATURE
Relative vapour density	<i>No data available</i>
Particle characteristics	<i>No data available</i>

9.2 Other information

No data available

SECTION 10

Stability & reactivity

10.1 Reactivity

The following applies in general to flammable organic substances and mixtures: in correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

Chemically stable under standard ambient conditions (room temperature)

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Not applicable

10.5 Incompatible materials

Strong oxidizing agents, strong bases

10.6 Hazardous decomposition products

In the event of fire: see section 5 (carbon oxides)

SECTION 11

Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity (LD50 / LC50)	LD50 Oral - Rat - female - 13,500 mg/kg (OECD 420); LD50 Dermal - Rat - male and female - > 16,000 mg/kg; Inhalation: no data available
Skin corrosion / irritation	<i>No data available</i>
Eye corrosion / irritation	<i>No data available</i>
Respiratory / skin sensitisation	<i>No data available</i>

Carcinogenicity	<i>No data available</i>
Mutagenicity	Negative in Ames test (OECD 471), in vitro chromosome aberration test in Chinese hamster lung cells (OECD 473), and mouse micronucleus test (OECD 474)
Reproductive toxicity	<i>No data available</i>
STOT (single / repeated exposure)	No data available for single or repeated exposure
Aspiration hazard	<i>No data available</i>

11.2 Information on other hazards

This product does not contain any known or suspected endocrine disruptors.

SECTION 12

Ecological information

12.1 Toxicity

Not applicable

12.2 Persistence and degradability

Not applicable

12.3 Bioaccumulative potential

Not applicable

12.4 Mobility in soil

Not applicable

12.5 Results of PBT and vPvB assessment

Not applicable

12.6 Endocrine disrupting properties

See Section 11.2.

12.7 Other adverse effects

No data available

SECTION 13

Disposal considerations

13.1 Waste treatment methods

Dispose of in accordance with local/national regulations

SECTION 14

Transport information

14.1 UN number or ID number

Not applicable

14.2 UN proper shipping name

Not applicable

14.3 Transport hazard class(es)

Not applicable

14.4 Packing group

Not applicable

14.5 Environmental hazards

Not applicable

14.6 Special precautions for user

Special precautions for user Not applicable

Transport category Not applicable

Tunnel code Not applicable

Packing instruction (ADR) Not applicable

Packing instruction (IMDG) Not applicable

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15

Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Substance-specific regulations (e.g. licences) This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

REACH code Y113

ECHA notification Not applicable

15.2 Chemical safety assessment

Not required

SECTION 16

Other information

Revision notes / other information Not applicable

This Safety Data Sheet was generated automatically from the data Molekula holds against this product, in the 16-section GHS/CLP format. Fields shown as "No data available" carry no recorded value; fields shown as "Not applicable" were assessed as not relevant to this substance. For queries, contact Molekula at info@molekula.com.