

Safety Data Sheet

#28377772 · 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
Paeoniflorin	23180-57-6	C23H28O11	10	04 Sep 2026

SECTION 1

Identification

1.1 Product identifier

Product name	Paeoniflorin
CAS number	23180-57-6
EC / EINECS number	245-476-2
Chemical formula	C23H28O11
Molecular weight	480.46
SMILES	<chem>O=C(OCC12C3OC4(O)CC(O3)(C)C2(OC5OC(CO)C(O)C(O)C5O)CC41)C=6C=CC=CC6</chem>

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

This product does not meet the criteria for classification in any hazard class 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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2.3 Other hazards

Not a hazardous substance or mixture according to Regulation (EC) No 1272/2008. Contains no PBT or vPvB components at $\geq 0.1\%$.

SECTION 3

Composition / information on ingredients

3.1 Substances

Name	Paeoniflorin
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CAS number	23180-57-6
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EC number	245-476-2
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Concentration / purity	No data available
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Classification according to Regulation (EC) No 1272/2008	This product does not meet the criteria for classification in any hazard class 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	No data available
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SECTION 4

First-aid measures

4.1 Description of first aid measures

Inhalation	Move person into fresh air; give artificial respiration if not breathing.
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Skin contact	Wash off with soap and plenty of water.
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Eye contact	Flush eyes with water as a precaution.
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Ingestion	Never give anything by mouth to an unconscious person; rinse mouth with water.
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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

No data available

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 spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Unsuitable extinguishing media No specific firefighting procedure given

5.2 Special hazards arising from the substance or mixture

Carbon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus if necessary.

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation; avoid breathing vapors, mist, or gas.

6.2 Environmental precautions

No special precautions required.

6.3 Methods and material for containment and cleaning up

Sweep up and shovel; keep in suitable, closed containers for disposal.

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

Provide exhaust ventilation where dust is formed; follow general industrial hygiene practices.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature 2 to 8 °C

Conditions for safe storage (incompatibilities) Keep container tightly closed in a dry, well-ventilated, cool place.
Incompatible with strong oxidizing agents.

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) *No data available*

DNEC/PNEC data *No data available*

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 Not required
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 *No data available*

SECTION 9

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

Appearance / physical state Powder
DERIVED FROM: LITERATURE

Colour Off-white
DERIVED FROM: LITERATURE

Odour Odourless
DERIVED FROM: LITERATURE

Melting / freezing point *Not applicable*

Boiling point *Not applicable*

Flammability *No data available*

Lower and upper explosion limit *No data available*

Flash point *Not applicable*

Auto-ignition temperature *No data available*

Decomposition temperature *No data available*

pH *No data available*

Acidity Neutral
DERIVED FROM: LITERATURE

Kinematic viscosity *No data available*

Solubility	Insoluble in water DERIVED FROM: LITERATURE
Partition coefficient n-octanol/water (log value)	<i>No data available</i>
Vapour pressure	<i>Not applicable</i>
Density (g/mL)	1 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

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents

10.6 Hazardous decomposition products

Carbon oxides (see Section 5)

SECTION 11

Toxicological information

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

Acute toxicity (LD50 / LC50)	<i>No data available</i>
Skin corrosion / irritation	<i>No data available</i>
Eye corrosion / irritation	No data available. No data available
Respiratory / skin sensitisation	<i>No data available</i>
Carcinogenicity	<i>No data available</i>
Mutagenicity	<i>No data available</i>

Reproductive toxicity	<i>No data available</i>
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STOT (single / repeated exposure)	<i>No data available</i>
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Aspiration hazard	<i>No data available</i>
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11.2 Information on other hazards

No data available

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

No PBT/vPvB components at $\geq 0.1\%$.

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) *No data available*

REACH code *Not applicable*

ECHA notification *Not applicable*

15.2 Chemical safety assessment

No

SECTION 16

Other information

Revision notes / other information

Hazard classification and labelling according to Regulation (EC) 1272/2008

All eye/face protection should comply with EN ISO 16321-1:2022

Respiratory equipment: Reusable air-purifying respirator (APR)

Filter Type: ABEK

Standard: EN 14387

National Regulations:

-Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances

Other regulations, limitations and legal regulations:

-Directive 94/33/EC- The protection of young people at work

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.