

Safety Data Sheet

#59717481 · 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
R)-(+)-Piperazine-2-carboxylic acid	31321-68-3	C5H10N2O2	10	15 Sep 2026

SECTION 1

Identification

Product name	R)-(+)-Piperazine-2-carboxylic acid
CAS number	31321-68-3
Chemical formula	C5H10N2O2
Molecular weight	130.15
SMILES	OC(=O)[C@H]1CNCCN1
EC / EINECS number	634-825-8
Recommended use & restrictions	For research and development. Laboratory chemicals. Manufacture of substances. Not suitable for human or veterinary purposes
Emergency telephone	0344 892 0111 — National Poisons Information Service (NPIS) (United Kingdom — for healthcare professionals (via TOXBASE))

SECTION 2

Hazard identification



WARNING

CODE	HAZARD STATEMENT
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
CODE	PRECAUTIONARY STATEMENT
P261	Avoid breathing dust/fume/gas/mist/vapours/spray
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P302+352	IF ON SKIN: Wash with soap and water
P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
P305+P351+P338	IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do, continue rinsing
P308+P313	IF exposed or concerned: Get medical advice/attention
Other hazards (e.g. PBT / vPvB, not classified)	Does not meet PBT or vPvB criteria under REACH Annex XIII. This product does not contain any known or suspected Endocrine disruptors.

SECTION 3

Composition / information on ingredients

Purity / concentration	~100.0%
Impurities / stabilising additives	None reported

SECTION 4

First-aid measures

Inhalation	Move to fresh air. Get medical attention if any discomfort continues.
Skin contact	Rinse skin with water. If skin irritation or rash occurs: get medical advice/attention.
Eye contact	Remove contact lenses if present. Rinse eyes with water. If eye irritation persists: get medical advice/attention.
Ingestion	Rinse mouth. Get medical advice/attention if you feel unwell.
Symptoms / effects & medical attention	Treat symptomatically

SECTION 5

Fire-fighting measures

Suitable extinguishing media	Foam, carbon dioxide, dry powder or water fog
Unsuitable extinguishing media	No limitation of extinguishing media given.
Special hazards	No data available.
Advice for firefighters	In the event of fire, wear self-contained breathing apparatus. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6

Accidental release measures

Personal precautions & PPE	Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. For personal protection, see section 8.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Containment & clean-up methods	Collect spillage with shovel, broom or the like.

For specific precautions, see Section 8 and Section 13.

SECTION 7

Handling & storage

Storage temperature Ambient

Precautions for safe handling Observe good chemical hygiene practices. Keep away from food, drink and animal feeding stuffs.
Wash contaminated skin thoroughly after handling. Do not eat, drink or smoke when using this product. Remove contaminated clothing and laundry thoroughly before re-use.

Conditions for safe storage (incompatibilities) Store under inert gas.

SECTION 8

Exposure controls / personal protection

Occupational exposure limits (OEL / WEL) No data to report.

DNEC/PNEC data *No data available*

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 Protective gloves.

Respiratory protection Half-mask with filter
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.

SECTION 9

Physical & chemical properties

Density (g/mL)	Not applicable
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Flash point	Not applicable
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Acidity	Acid DERIVED FROM: LITERATURE
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Appearance / physical state	Solid DERIVED FROM: LITERATURE
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Colour	No data available
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Odour	Not known DERIVED FROM: LITERATURE
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Melting / freezing point	No data available. DERIVED FROM: LITERATURE
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Boiling point	No data available. DERIVED FROM: LITERATURE
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Solubility (water)	No data available
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pH	No data available. DERIVED FROM: LITERATURE
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Vapour pressure	No data available. DERIVED FROM: LITERATURE
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Partition coefficient (log Pow)	No data available. DERIVED FROM: LITERATURE
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Auto-ignition / decomposition temp	No data available. DERIVED FROM: LITERATURE
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SECTION 10

Stability & reactivity

Chemical stability / reactivity	Stable under the prescribed storage conditions
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Conditions to avoid	None known
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Incompatible materials	Strong oxidising agents
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Hazardous decomposition products	See section 5
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SECTION 11

Toxicological information

Acute toxicity (LD50 / LC50)	Acute Toxicity Estimate (ATE): LD50 > 300 mg/kg < 2000 mg/kg
Skin corrosion / irritation	Causes skin irritation
Eye corrosion / irritation	Causes serious eye irritation
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>
STOT (single / repeated exposure)	May cause respiratory irritation.
Aspiration hazard	Material is a solid.
Endocrine disruptors	Not considered an endocrine disruptor.

SECTION 12

Ecological information

Aquatic toxicity	<i>No data available</i>
Persistence & degradability	<i>No data available</i>
Bioaccumulative potential	<i>No data available</i>
Mobility in soil	<i>No data available</i>
PBT / vPvB assessment	This substance/mixture does not meet the PBT criteria of REACH Annex XIII. This substance/mixture does not meet the vPvB criteria of REACH Annex XIII

SECTION 13

Disposal considerations

Waste treatment / disposal methods	Dispose of in accordance with local/national regulations
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SECTION 14

Transport information

UN number *Not applicable*

Proper shipping name *Not applicable*

Class *Not applicable*

Packing group *Not applicable*

Transport category *Not applicable*

Tunnel code *Not applicable*

Packing instruction (ADR) *Not applicable*

Packing instruction (IMDG) *Not applicable*

Environmental hazards *Not applicable*

Special precautions for user *Not applicable*

SECTION 15

Regulatory information

REACH code Y110

UFI code *Not applicable*

ECHA notification *Not applicable*

Chemical safety assessment carried out? No

SECTION 16

Other information

Revision notes / other information Initial version created 15.09.2026

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