

Safety Data Sheet

#76997126 · 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
2,5-Di-tert-butylhydroquinone	88-58-4	C14H22O2	10	21 Sep 2026

SECTION 1

Identification

1.1 Product identifier

Product name 2,5-Di-tert-butylhydroquinone

CAS number 88-58-4

EC / EINECS number 201-841-8

Chemical formula C14H22O2

Molecular weight 222.32

SMILES CC(C)(C)C1=CC(=C(C=C1O)C(C)(C)C)O

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

For research use, laboratory use, manufacture of chemicals. Not 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

Acute Tox. 3; H301

Skin Sens. 1; H317

STOT SE 3; H335

STOT RE 2; H373

Aquatic Chronic 1; H410

2.2 Label elements



DANGER

CODE	HAZARD STATEMENT
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H301	Toxic if swallowed
H317	May cause an allergic skin reaction
H335	May cause respiratory irritation
H373	May cause damage to organs through prolonged or repeated exposure
H410	Very toxic to aquatic life with long lasting effects

CODE	PRECAUTIONARY STATEMENT
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P260	Do not breathe dust/fume/gas/mist/vapours/spray
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
P302+P352	IF ON SKIN: Wash with soap and water
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

2.3 Other hazards

Does not contain components considered to have endocrine-disrupting properties. Does not meet PBT or vPvB criteria under REACH Annex XIII.

SECTION 3

Composition / information on ingredients**3.1 Substances**

Name	2,5-Di-tert-butylhydroquinone
CAS number	88-58-4
EC number	201-841-8
Concentration / purity	c. 100%
Classification according to Regulation (EC) No 1272/2008	Acute Tox. 3; H301 Skin Sens. 1; H317 STOT SE 3; H335 STOT RE 2; H373 Aquatic Chronic 1; H410
Hazard statements	H301, H317, H335, H373, H410
Acute toxicity estimate (ATE)	Acute: M=10 Chronic: M=1
Impurities / stabilising additives	<i>Not applicable</i>

SECTION 4

First-aid measures**4.1 Description of first aid measures**

Inhalation	Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
Skin contact	Wash with plenty of water. Continue to rinse for at least 15 minutes and seek medical attention.
Eye contact	Remove contact lenses if present. Rinse eyes with water. Continue to rinse for at least 15 minutes and seek medical attention.
Ingestion	After swallowing: make victim drink water (two glasses at most), avoid vomiting (risk of perforation). Call a physician immediately. Do not attempt to neutralise.

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

See Section 11

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 For this substance/mixture no limitations of extinguishing agents are given.

Unsuitable extinguishing media None known

5.2 Special hazards arising from the substance or mixture

Hazardous decomposition products: Carbon oxides

Combustible.

Development of hazardous combustion gases or vapours possible in the event of fire.

5.3 Advice for firefighters

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6

Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid breathing dust/fume/gas/mist/vapours/spray. Provide adequate ventilation. For personal protection, see section 8.

6.2 Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if product enters sewers or public waters.

6.3 Methods and material for containment and cleaning up

Absorb spillage with a suitable absorbent material.

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

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 launder thoroughly before re-use.

7.2 Conditions for safe storage, including any incompatibilities

Storage temperature Ambient

Conditions for safe storage (incompatibilities) Store at ambient temperature. Store in a dry place. Store in a closed container.
Air sensitive. Light sensitive. Store under inert gas.

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	Self-contained breathing apparatus 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	<i>No data available</i>
Environmental exposure controls	<i>No data available</i>

SECTION 9

Physical & chemical properties

9.1 Information on basic physical and chemical properties

Appearance / physical state	Solid DERIVED FROM: LITERATURE
Colour	White to beige DERIVED FROM: LITERATURE
Odour	Characteristic DERIVED FROM: LITERATURE
Melting / freezing point	212-218°C DERIVED FROM: LITERATURE
Boiling point	318-321°C DERIVED FROM: LITERATURE
Flammability	<i>No data available</i>
Lower and upper explosion limit	<i>No data available</i>
Flash point	<i>Not applicable</i>

Auto-ignition temperature	421°C DERIVED FROM: LITERATURE
Decomposition temperature	No data available
pH	Not applicable
Acidity	Neutral DERIVED FROM: LITERATURE
Kinematic viscosity	No data available
Solubility	0.004 g/l at 30 °C DERIVED FROM: LITERATURE
Partition coefficient n-octanol/water (log value)	2.44 at 30°C DERIVED FROM: LITERATURE
Vapour pressure	Not applicable
Density (g/mL)	1.07 g/mL DERIVED FROM: LITERATURE
Relative vapour density	Not applicable
Particle characteristics	Not applicable

9.2 Other information

No data available

SECTION 10

Stability & reactivity

10.1 Reactivity

In correspondingly fine distribution, when whirled up a dust explosion potential may generally be assumed.

10.2 Chemical stability

Stable under the prescribed storage conditions

10.3 Possibility of hazardous reactions

None known

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidising agents. Strong bases (alkalis)

10.6 Hazardous decomposition products

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)	LD50 Oral - Rat - female - 50 - 300 mg/kg
Skin corrosion / irritation	Not classified
Eye corrosion / irritation	Not classified
Respiratory / skin sensitisation	May cause an allergic skin reaction
Carcinogenicity	Not classified
Mutagenicity	Not classified
Reproductive toxicity	Not classified
STOT (single / repeated exposure)	Single exposure: May cause respiratory irritation. May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not classified

11.2 Information on other hazards

Not classified

SECTION 12

Ecological information

12.1 Toxicity

semi-static test EC50 - Daphnia magna (Water flea) - 0.4 mg/l - 48 h Ref: External SDS

static test EC50 - Pseudokirchneriella subcapitata (microalgae) - 0.038 mg/l - 72 h Ref: External SDS

12.2 Persistence and degradability

aerobic - Exposure time 28 d Result: 6 % - Not readily biodegradable. Ref: External SDS

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

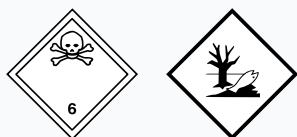
UN2811

14.2 UN proper shipping name

TOXIC SOLID, ORGANIC, N.O.S. (2,5-Di-tert-butylhydroquinone)

14.3 Transport hazard class(es)

6.1



14.4 Packing group

III

14.5 Environmental hazards

Marine pollutant

14.6 Special precautions for user

Special precautions for user For specific precautions see Section 8 and Section 13

Transport category 2

Tunnel code (E)

Packing instruction (ADR) P002

Packing instruction (IMDG) P002

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)

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.

REACH code Y110

ECHA notification *Not applicable*

15.2 Chemical safety assessment

Not applicable

SECTION 16

Other information

Revision notes / other information

Replaces previous SDS Ver. 1.0 published 23rd September 2019

Full text of H-Statements:

H301 Toxic if swallowed

H317 May cause an allergic skin reaction

H335 May cause respiratory irritation

H373 May causes damage to organs through prolonged or repeated exposure

H410 Very toxic to aquatic life with long lasting effects

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.