

Otto Chemie Pvt Ltd

An ISO 9001 : 2015 & GMP Certified Company
Office : No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)
Tel : + 91 98200 41841 Email : info@ottokemi.com Web : www.ottokemi.com

MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1: Product identifiers

Product Name : tert-Butylhydroquinone, 98%
Product Code : B 2405
CAS No: 1948-33-0

1.2. Relevant identified uses of the substance or mixture and uses advised against
Use : Industrial. For professional use only.

1.3. Details of the supplier of the safety data sheet

Company identification
OTTO CHEMIE PVT LTD
No 603, 6th Floor, Tardeo AC Market, 87, Tardeo Road,
Tardeo, Mumbai, Maharashtra 400034, India (BHARAT)

1.4. Emergency telephone number

Phone no. : + 91 98200 41841 (10 : 00 am – 06 : 00 pm)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Acute toxicity, (Category 4) H302: Harmful if swallowed.
Acute toxicity, (Category 4) H312: Harmful in contact with skin.
Skin irritation, (Category 2) H315: Causes skin irritation.
Eye irritation, (Category 2) H319: Causes serious eye irritation.
Skin sensitization, (Category 1) H317: May cause an allergic skin reaction.
Short-term (acute) aquatic hazard, (Category 1) H400: Very toxic to aquatic life.
Long-term (chronic) aquatic

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

hazard, (Category 1)

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal Word

Hazard Statements

H302 + H312

H315

H317

H319

H410

Precautionary Statements

P261

P273

P280

P301 + P312

P302 + P352 + P312

P305 + P351 + P338

Supplemental Hazard Statements

Reduced Labeling (<= 125 ml)

Pictogram

Signal Word

Hazard Statements

H317

Warning

Harmful if swallowed or in contact with skin.

Causes skin irritation.

May cause an allergic skin reaction.

Causes serious eye irritation.

Very toxic to aquatic life with long lasting effects.

Avoid breathing dust.

Avoid release to the environment.

Wear protective gloves/ protective clothing/ eye protection/ face protection.

IF SWALLOWED: Call a POISON CENTER/ doctor if you feel unwell.

IF ON SKIN: Wash with plenty of water. Call a POISON CENTER/ doctor if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

none

Warning

May cause an allergic skin reaction.

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Precautionary Statements

P261

Avoid breathing dust.

Supplemental Hazard Statements

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information:

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.1 Substances

Synonyms : 2-(1,1-Dimethylethyl)-1,4-benzenediol
NSC 4972
Formula : C₁₀H₁₄O₂
Molecular weight : 166,22 g/mol
CAS-No. : 1948-33-0
EC-No. : 217-752-2

Component	Classification	Concentration
2-tert-Butylhydroquinone		
CAS-No 1948-33-0 EC-No. 217-752-2	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2; Skin Sens. 1; Aquatic Acute 1; Aquatic Chronic 1; H302, H312, H315, H319, H317, H400, H410 M-Factor - Aquatic Acute: 1 - Aquatic Chronic: 1	<= 100 %

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice

Show this material safety data sheet to the doctor in attendance.

If inhaled

After inhalation: fresh air.

In case of skin contact

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact

After eye contact: rinse out with plenty of water. Call in ophthalmologist. Remove contact lenses.

If swallowed

After swallowing: immediately make victim drink water (two glasses at most). Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water Foam Carbon dioxide (CO₂) Dry powder

Unsuitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Carbon oxides

Combustible.

Vapors are heavier than air and may spread along floors.

Forms explosive mixtures with air on intense heating.

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.

5.4 Further information

Remove container from danger zone and cool with water. 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

Advice for non-emergency personnel: Avoid inhalation of dusts. Avoid substance contact.

Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

For personal protection see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling

Work under hood. Do not inhale substance/mixture.

Advice on protection against fire and explosion

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Hygiene measures

Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions

Tightly closed. Dry.

Storage class

Storage class (TRGS 510): 13: Non Combustible Solids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters

8.2 Exposure controls

Personal protective equipment

Eye/face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses

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Skin protection

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Full contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested:KCL 741 Dermatril® L

This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN 16523-1 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

Splash contact

Material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Material tested:KCL 741 Dermatril® L

Body Protection

Flame retardant antistatic protective clothing.

Respiratory protection

required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P2

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer.

These measures have to be properly documented.

Control of environmental exposure

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a) Physical state	powder
b) Color	off-white
c) Odor	characteristic
d) Melting point/freezing point	Melting point/range: 104 - 107,3 °C at 972,2 hPa - OECD Test Guideline 102
e) Initial boiling point and boiling range	295 °C
f) Flammability (solid, gas)	The product is not flammable.
g) Upper/lower flammability or explosive limits	No data available
h) Flash point	91 °C - closed cup
i) Autoignition temperature	No data available
j) Decomposition temperature	No data available
k) pH	4,56 at 25 °C
l) Viscosity	Viscosity, kinematic: No data available Viscosity, dynamic: No data available
m) Water solubility	2.887,35 g/l at 25 °C - OECD Test Guideline 105- soluble
n) Partition coefficient: n-octanol/water	log Pow: 1,52 at 25 °C - Bioaccumulation is not expected.

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o) Vapor pressure	No data available
p) Density	0,78 g/cm ³ at 20 °C - OECD Test Guideline 109
Relative density	No data available
q) Relative vapor density	No data available
r) Particle characteristics	No data available
s) Explosive properties	No data available
t) Oxidizing properties	none
9.2 Other safety information	
Solubility in other solvents	
Methanol 3.000 g/l at 30 °C	
Dissociation constant 0 at 30 °C	

SECTION 10: Stability and reactivity

10.1 Reactivity

Forms explosive mixtures with air on intense heating.

A range from approx. 15 Kelvin below the flash point is to be rated as critical.

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

The product is chemically stable under standard ambient conditions (room temperature) .

10.3 Possibility of hazardous reactions

Violent reactions possible with:

Strong oxidizing agents

Bases

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

In the event of fire: see section 5

SECTION 12: Ecological information

12.1 Toxicity

Toxicity to fish static test LC50 - Danio rerio (zebra fish) - 0,3 - 0,48 mg/l - 96 h (OECD Test Guideline 203)

Toxicity to daphnia

and other aquatic

invertebrates

static test EC50 - Daphnia magna (Water flea) - 0,57 mg/l - 48 h

(OECD Test Guideline 202)

Toxicity to algae static test ErC50 - Desmodesmus subspicatus (green algae) - 9,3 mg/l - 72 h

(OECD Test Guideline 201)

12.2 Persistence and degradability

Biodegradability Result: 52,91 % - Inherently biodegradable.

(OECD Test Guideline 301D)

Biochemical Oxygen

Demand (BOD)

70 mg/g

Remarks: (External MSDS)

2.000 mg/g

Remarks: (External MSDS)

Chemical Oxygen

Demand (COD)

2.200 mg/g

Remarks: (External MSDS)

Theoretical oxygen

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demand

2.450 mg/g

Remarks: (External MSDS)

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties

Product:

Assessment :

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Additional ecological information

Discharge into the environment must be avoided.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

No data available

SECTION 14: Transport information

14.1 UN number

ADR/RID: 3077

IMDG: 3077

IATA: 3077

14.2 UN proper shipping name

ADR/RID:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-tertButylhydroquinone)

IMDG:

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2-tertButylhydroquinone)

IATA:

Environmentally hazardous substance, solid, n.o.s. (2-tert-Butylhydroquinone)

14.3 Transport hazard class(es)

ADR/RID: 9

IMDG: 9

IATA: 9

14.4 Packaging group

ADR/RID: III

IMDG: III

IATA: III

14.5 Environmental hazards

ADR/RID: yes

IMDG Marine pollutant: yes IATA: yes

14.6 Special precautions for user

Tunnel restriction code : (-)

Further information

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packagings and combination packagings containing inner packagings with Dangerous Goods > 5L for liquids or > 5kg for solids. Packages smaller than or equal to 5 kg / L , not dangerous goods of

SECTION 15: Regulatory information

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

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

National legislation

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

E1 ENVIRONMENTAL HAZARDS

Other regulations

Observe work restrictions regarding maternity protection in accordance to Dir 92/85/EEC or stricter national regulations where applicable.

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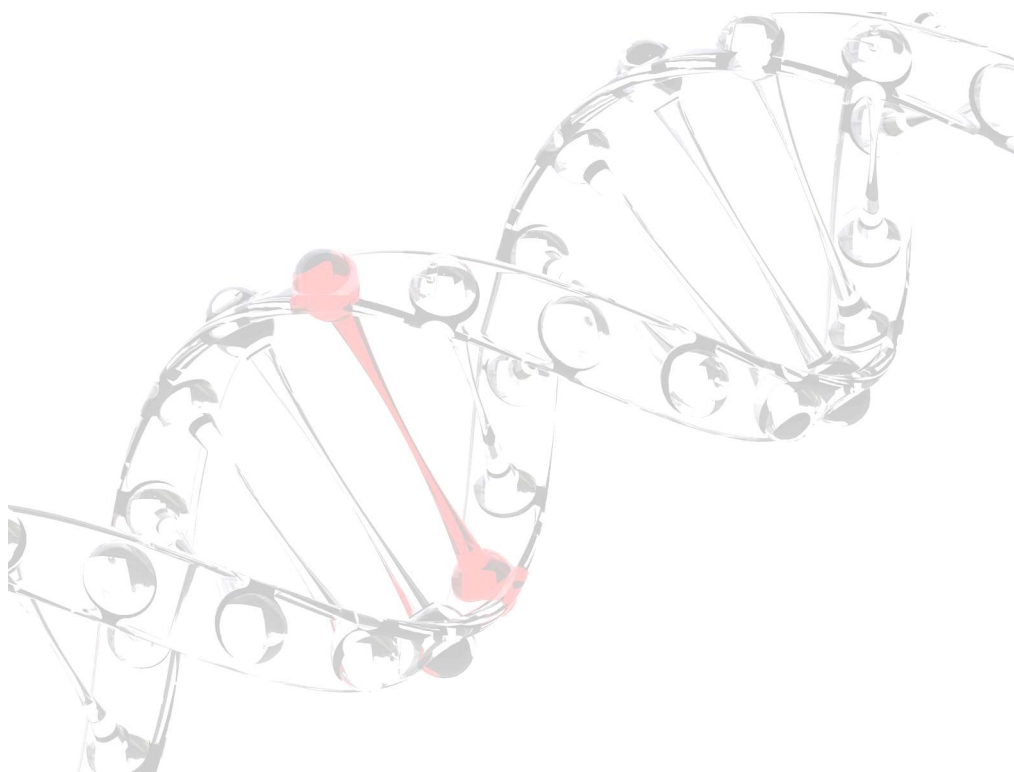
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Take note of Dir 94/33/EC on the protection of young people at work.
15.2 Chemical Safety Assessment
For this product a chemical safety assessment was not carried out

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.



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