

# SAFETY DATA SHEETS

According to the UN GHS revision 10

Version: 1.1  
Creation Date: July 15, 2024  
Revision Date: January 06, 2025

## SECTION 1: Identification

### 1.1 GHS Product identifier

Product name 2-Tert-Butyl-4-Methoxyphenol (BHA)

### 1.2 Other means of identification

Product number 121-00-6  
Other names BUTYL HYDROXY ANISOLE; 2-tert-Bha; 3-TERT-BUTYL-4-HYDROXYANISOLE

### 1.3 Recommended use of the chemical and restrictions on use

Identified uses For laboratory and Industrial use only.  
Uses advised against no data available

### 1.4 Supplier's details

Company Zhongshan Greenrock Technology Co., Ltd.  
Address Jinsan Avenue, Sanjiao Town, Zhongshan City, Guangdong Province, China  
Telephone +86-2087066781

### 1.5 Emergency phone number

Emergency phone number +86-2087066781  
Service hours 'Monday to Friday, 9am-5pm (Standard time zone: UTC/GMT +8 hours).

## SECTION 2: Hazard identification

### 2.1 Classification of the substance or mixture

Not classified.

### 2.2 GHS label elements, including precautionary statements

Pictogram(s) No symbol.  
Signal word No signal word  
Hazard statement(s) none  
Precautionary statement(s)  
Prevention none  
Response none  
Storage none  
Disposal none

### 2.3 Other hazards which do not result in classification

no data available

## SECTION 3: Composition/information on ingredients

### 3.1 Substances

Chemical name	Common names and synonyms	CAS number	EC number	Concentration
2-Tert-Butyl-4-Methoxyphenol (BHA)	2-tert-butyl-4-methoxyphenol	121-00-6	204-442-7	≈ 99%

## SECTION 4: First-aid measures

### 4.1 Description of necessary first-aid measures

If inhaled  
Move the victim into fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration and consult a doctor immediately. Do not use mouth to mouth resuscitation if the victim ingested or inhaled the chemical.

Following skin contact  
Take off contaminated clothing immediately. Wash off with soap and plenty of water. Consult a doctor.

Following eye contact

Rinse with pure water for at least 15 minutes. Consult a doctor.

#### **Following ingestion**

Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Call a doctor or Poison Control Center immediately.

### **4.2 Most important symptoms/effects, acute and delayed**

SYMPTOMS: Symptoms of exposure to this compound may include allergic contact dermatitis, exacerbation of vasomotor rhinitis, conjunctival irritation and redness, asthma, facial flushing, marked diaphoresis, headaches, dull retrosternal pain and somnolence. It may also cause hypersensitivity reactions after skin contact. ACUTE/CHRONIC HAZARDS: This compound is toxic by ingestion. When heated to decomposition this compound emits acrid smoke and irritating fumes. (NTP, 1992)

### **4.3 Indication of immediate medical attention and special treatment needed, if necessary**

#### **Absorption, Distribution and Excretion**

Concentrations of 2-tert-butyl-4-methoxyphenol & 2,2'-dihydroxy-3,3'-di-tert-butyl-5,5'-dimethoxy-diphenyl (di-bha) appeared at different times (0.15-24 hr) in rat plasma & intestine following 2 g/kg single oral admin of 2-tert-butyl-4-methoxyphenol. peak concn in all tissues analyzed were observed within 1 hr of admin. in intestine 2-tert-butyl-4-methoxyphenol levels were approx 10 times higher than di-bha; in plasma they were between 100 & 15 times higher. the rat intestine is capable of transforming in vivo 2-tert-butyl-4-methoxyphenol into di-bha & may be major site where this transformation occurs.

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## **SECTION 5: Fire-fighting measures**

### **5.1 Suitable extinguishing media**

Fires involving this compound can be controlled with a dry chemical, carbon dioxide or Halon extinguisher. (NTP, 1992)

### **5.2 Specific hazards arising from the chemical**

This chemical is combustible. (NTP, 1992)

### **5.3 Special protective actions for fire-fighters**

Wear self-contained breathing apparatus for firefighting if necessary.

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## **SECTION 6: Accidental release measures**

### **6.1 Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Avoid breathing mist, gas or vapours. Avoid contacting with skin and eye. Use personal protective equipment. Wear chemical impermeable gloves. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

### **6.2 Environmental precautions**

Prevent further spillage or leakage if it is safe to do so. Do not let the chemical enter drains. Discharge into the environment must be avoided.

### **6.3 Methods and materials for containment and cleaning up**

Collect and arrange disposal. Keep the chemical in suitable and closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

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## **SECTION 7: Handling and storage**

### **7.1 Precautions for safe handling**

Handling in a well ventilated place. Wear suitable protective clothing. Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Use non-sparking tools. Prevent fire caused by electrostatic discharge steam.

### **7.2 Conditions for safe storage, including any incompatibilities**

Store the container tightly closed in a dry, cool and well-ventilated place. Store apart from foodstuff containers or incompatible materials.

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## **SECTION 8: Exposure controls/personal protection**

### **8.1 Control parameters**

#### **Occupational Exposure limit values**

no data available

#### **Biological limit values**

no data available

### **8.2 Appropriate engineering controls**

Ensure adequate ventilation. Handle in accordance with good industrial hygiene and safety practice. Set up emergency exits and the risk-elimination area.

### **8.3 Individual protection measures, such as personal protective equipment (PPE)**

**Eye/face protection**

Wear tightly fitting safety goggles with side-shields conforming to EN 166(EU) or NIOSH (US).

**Skin protection**

Wear fire/flame resistant and impervious clothing. Handle with gloves. Gloves must be inspected prior to use. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Respiratory protection**

If the exposure limits are exceeded, irritation or other symptoms are experienced, use a full-face respirator.

**Thermal hazards**

no data available

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**SECTION 9: Physical and chemical properties and safety characteristics**

Physical state	Solid. Waxy.
Colour	White.
Odour	no data available
Melting point/freezing point	58 °C. Atm. press.:977 hPa. Remarks:Other details not available.
Boiling point or initial boiling point and boiling range	> 240 °C. Atm. press.:980.2 hPa. Remarks:Other details not available.
Flammability	no data available
Lower and upper explosion limit/flammability limit	no data available
Flash point	116.6 °C. Atm. press.:981 hPa.
Auto-ignition temperature	Atm. press.:966 hPa. Remarks:Tert-butyl-4-methoxyphenol did not catch fire on being exposed to air at room temperature of 27°C.
Decomposition temperature	no data available
pH	4.78. Remarks:Near neutral.
Kinematic viscosity	no data available
Solubility	less than 1 mg/mL at 65.3° F (NTP, 1992)
Partition coefficient n-octanol/water	log Pow = 2.8. Temperature:27 °C.
Vapour pressure	0.002 mm Hg. Temperature:25 °C.
Density and/or relative density	0.69 g/cm <sup>3</sup> . Temperature:28.6 °C.;0.69 g/cm <sup>3</sup> . Temperature:28.6 °C.
Relative vapour density	no data available
Particle characteristics	no data available

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**SECTION 10: Stability and reactivity****10.1 Reactivity**

no data available

**10.2 Chemical stability**

no data available

**10.3 Possibility of hazardous reactions**

BUTYLATED HYDROXYANISOLE degrades with prolonged exposure to sunlight. Exhibits antioxidant properties and synergism with acids, BHT, propyl gallate, hydroquinone, methionine, lecithin and thiodipropionic acid. It exhibits antioxidant properties as a scavenger of free radicals. It is incompatible with oxidizing agents and ferric salts. (NTP, 1992)

**10.4 Conditions to avoid**

no data available

**10.5 Incompatible materials**

no data available

**10.6 Hazardous decomposition products**

When heated to decomposition it emits acrid smoke and irritating fumes.

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**SECTION 11: Toxicological information****Acute toxicity**

- Oral: LD0 - rat (female) - 2 000 mg/kg bw.
- Inhalation: LC50 - mouse - 240.263 ppm.
- Dermal: LD50 - rat (male/female) - > 2 000 mg/kg bw.

**Skin corrosion/irritation**

no data available

**Serious eye damage/irritation**

no data available

**Respiratory or skin sensitization**

no data available

**Germ cell mutagenicity**

no data available

**Carcinogenicity**

no data available

**Reproductive toxicity**

no data available

**STOT-single exposure**

no data available

**STOT-repeated exposure**

no data available

**Aspiration hazard**

no data available

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## SECTION 12: Ecological information

### 12.1 Toxicity

- Toxicity to fish: LC50 - *Oryzias latipes* - 5.6 mg/L - 24 h.
- Toxicity to daphnia and other aquatic invertebrates: LC50 - other aquatic mollusc: *Dreissena polymorpha* - 65 mg/L - 48 h.
- Toxicity to algae: EC50 - *Chlorella vulgaris* - 9.05 mg/L - 72 h.
- Toxicity to microorganisms: IGC50 - *Tetrahymena pyriformis* - 10.406 mg/L - 48 h.

### 12.2 Persistence and degradability

no data available

### 12.3 Bioaccumulative potential

no data available

### 12.4 Mobility in soil

no data available

### 12.5 Other adverse effects

no data available

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## SECTION 13: Disposal considerations

### 13.1 Disposal methods

**Product**

The material can be disposed of by removal to a licensed chemical destruction plant or by controlled incineration with flue gas scrubbing. Do not contaminate water, foodstuffs, feed or seed by storage or disposal. Do not discharge to sewer systems.

**Contaminated packaging**

Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

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## SECTION 14: Transport information

### 14.1 UN Number

ADR/RID: UN3077 (For reference only, please check.)	IMDG: UN3077 (For reference only, please check.)	IATA: UN3077 (For reference only, please check.)
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### 14.2 UN Proper Shipping Name

ADR/RID: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (For reference only, please check.)	IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (For reference only, please check.)	IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (For reference only, please check.)
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### 14.3 Transport hazard class(es)

ADR/RID: 9 (For reference only, please check.) IMDG: 9 (For reference only, please check.) IATA: 9 (For reference only, please check.)

#### 14.4 Packing group, if applicable

ADR/RID: III (For reference only, please check.)

IMDG: III (For reference only, please check.)

IATA: III (For reference only, please check.)

#### 14.5 Environmental hazards

ADR/RID: Yes

IMDG: Yes

IATA: Yes

#### 14.6 Special precautions for user

no data available

#### 14.7 Transport in bulk according to IMO instruments

no data available

### SECTION 15: Regulatory information

#### 15.1 Safety, health and environmental regulations specific for the product in question

Chemical name	Common names and synonyms	CAS number	EC number
2-tert-butyl-4-methoxyphenol	2-tert-butyl-4-methoxyphenol	121-00-6	204-442-7
European Inventory of Existing Commercial Chemical Substances (EINECS)			Listed.
EC Inventory			Listed.
United States Toxic Substances Control Act (TSCA) Inventory			Listed.
China Catalog of Hazardous chemicals 2015			Not Listed.
New Zealand Inventory of Chemicals (NZIoC)			Listed.
Philippines Inventory of Chemicals and Chemical Substances (PICCS)			Listed.
Vietnam National Chemical Inventory			Listed.
Chinese Chemical Inventory of Existing Chemical Substances (China IECSC)			Listed.
Korea Existing Chemicals List (KECL)			Not Listed.

### SECTION 16: Other information

#### Information on revision

Creation Date July 15, 2024

Revision Date January 06, 2025

#### Abbreviations and acronyms

- CAS: Chemical Abstracts Service
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- RID: Regulation concerning the International Carriage of Dangerous Goods by Rail
- IMDG: International Maritime Dangerous Goods
- IATA: International Air Transportation Association
- TWA: Time Weighted Average
- STEL: Short term exposure limit
- LC50: Lethal Concentration 50%
- LD50: Lethal Dose 50%
- EC50: Effective Concentration 50%

#### References

- IPCS - The International Chemical Safety Cards (ICSC), website: <http://www.ilo.org/dyn/icsc/showcard.home>
- HSDB - Hazardous Substances Data Bank, website: <https://toxnet.nlm.nih.gov/newtoxnet/hsdb.htm>
- IARC - International Agency for Research on Cancer, website: <http://www.iarc.fr/>
- eChemPortal - The Global Portal to Information on Chemical Substances by OECD, website: [http://www.echemportal.org/echemportal/index?pageID=0&request\\_locale=en](http://www.echemportal.org/echemportal/index?pageID=0&request_locale=en)
- CAMEO Chemicals, website: <http://cameochemicals.noaa.gov/search/simple>
- ChemIDplus, website: <http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ERG - Emergency Response Guidebook by U.S. Department of Transportation, website: <http://www.phmsa.dot.gov/hazmat/library/erg>
- Germany GESTIS-database on hazard substance, website: <http://www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index-2.jsp>
- ECHA - European Chemicals Agency, website: <https://echa.europa.eu/>

Any questions regarding this SDS, Please send your inquiry to [export@greenrockchem.com](mailto:export@greenrockchem.com)

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