# SAFETY DATA SHEET

Version 5.4 Revision Date 08/02/2016 Print Date 11/20/2018

## 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifiers

Product name : Butylhydroxyanisole

Product Number : B1212000 Brand : Sigma-Aldrich

CAS-No. : 25013-16-5

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich

3050 Spruce Street SAINT LOUIS MO 63103

USA

Telephone : +1 800-325-5832 Fax : +1 800-325-5052

1.4 Emergency telephone number

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

# 2. HAZARDS IDENTIFICATION

# 2.1 Classification of the substance or mixture

# GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Acute toxicity, Oral (Category 4), H302 Skin irritation (Category 2), H315 Eye irritation (Category 2A), H319 Carcinogenicity (Category 2), H351

Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

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

# 2.2 GHS Label elements, including precautionary statements

Pictogram

**(1)** 

Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed.
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

H335 May cause respiratory irritation. H351 Suspected of causing cancer.

Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and

understood.

Sigma-Aldrich - B1212000 Page 1 of 8

P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264	Wash skin thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/ eye protection/ face protection.
P301 + P312	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.
P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously 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.
P321	Specific treatment (see supplemental first aid instructions on this label).
P330	Rinse mouth.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

# 2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Formula : C<sub>11</sub>H<sub>16</sub>O<sub>2</sub>

Molecular weight : 180.24 g/mol
CAS-No. : 25013-16-5
EC-No. : 246-563-8

# **Hazardous components**

Component	Classification	Concentration
tert-Butyl-4-methoxyphenol		
	Acute Tox. 4; Skin Irrit. 2; Eye Irrit. 2A; Carc. 2; STOT SE 3; H302, H315, H319, H335, H351	<= 100 %

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

# 4. FIRST AID MEASURES

# 4.1 Description of first aid measures

# General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

# If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

# In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. 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

Sigma-Aldrich - B1212000 Page 2 of 8

#### 4.3 Indication of any immediate medical attention and special treatment needed

No data available

## 5. FIREFIGHTING MEASURES

## 5.1 Extinguishing media

# Suitable extinguishing media

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

## 5.2 Special hazards arising from the substance or mixture

No data available

## 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

### 5.4 Further information

No data available

# 6. ACCIDENTAL RELEASE MEASURES

## 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

## 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

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

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

#### 6.4 Reference to other sections

For disposal see section 13.

#### 7. HANDLING AND STORAGE

# 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed.

For precautions see section 2.2.

# 7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

# 7.3 Specific end use(s)

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

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

# 8.1 Control parameters

# Components with workplace control parameters

Contains no substances with occupational exposure limit values.

# 8.2 Exposure controls

#### Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

#### Personal protective equipment

### Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Sigma-Aldrich - B1212000 Page 3 of 8

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

# Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

a) Appearance Form: flakes

Colour: white

b) Odour No data available Odour Threshold No data available No data available

e) Melting point/freezing

point

Melting point/range: 57 °C (135 °F)

Initial boiling point and

boiling range

268 °C (514 °F) at 1,013 hPa (760 mmHg)

g) Flash point 113 °C (235 °F) - closed cup

h) Evaporation rate No data available Flammability (solid, gas) No data available i) Upper/lower No data available j)

flammability or explosive limits

k) Vapour pressure No data available Vapour density No data available No data available m) Relative density

n) Water solubility insoluble

Partition coefficient: n-

octanol/water

log Pow: 3.335

**Auto-ignition** No data available temperature

Decomposition temperature

No data available

No data available Viscosity No data available s) Explosive properties No data available t) Oxidizing properties

#### 9.2 Other safety information

No data available

Sigma-Aldrich - B1212000 Page 4 of 8

#### 10. STABILITY AND 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 agentsStrong acids, Strong bases

## 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

In the event of fire: see section 5

#### 11. TOXICOLOGICAL INFORMATION

# 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - 2,000 mg/kg

Remarks: Behavioral:Altered sleep time (including change in righting reflex). Behavioral:Ataxia. Lungs, Thorax, or

Respiration: Respiratory stimulation.

Inhalation: No data available

Dermal: No data available

No data available

# Skin corrosion/irritation

No data available

# Serious eye damage/eye irritation

No data available

# Respiratory or skin sensitisation

No data available

# Germ cell mutagenicity

Laboratory experiments have shown mutagenic effects.

# Carcinogenicity

This product is or contains a component that has been reported to be possibly carcinogenic based on its IARC, ACGIH, NTP, or EPA classification.

Limited evidence of carcinogenicity in animal studies

IARC: 2B - Group 2B: Possibly carcinogenic to humans (tert-Butyl-4-methoxyphenol)

IARC: 2B - Group 2B: Possibly carcinogenic to humans (tert-Butyl-4-methoxyphenol)

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by ACGIH.

NTP: Reasonably anticipated to be a human carcinogen (tert-Butyl-4-methoxyphenol)

NTP: Reasonably anticipated to be a human carcinogen (tert-Butyl-4-methoxyphenol)

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a

carcinogen or potential carcinogen by OSHA.

No component of this product present at levels greater than or equal to 0.1% is identified as a

Sigma-Aldrich - B1212000 Page 5 of 8

carcinogen or potential carcinogen by OSHA.

# Reproductive toxicity

No data available

Overexposure may cause reproductive disorder(s) based on tests with laboratory animals.

# Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation.

# Specific target organ toxicity - repeated exposure

No data available

# **Aspiration hazard**

No data available

#### **Additional Information**

RTECS: SL1945000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

# 12. ECOLOGICAL INFORMATION

# 12.1 Toxicity

No data available

Toxicity to daphnia and Remarks: No data available other aquatic

invertebrates

# 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 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

No data available

# 13. DISPOSAL CONSIDERATIONS

### 13.1 Waste treatment methods

# **Product**

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

## Contaminated packaging

Dispose of as unused product.

## 14. TRANSPORT INFORMATION

# DOT (US)

Not dangerous goods

# **IMDG**

Not dangerous goods

#### **IATA**

Not dangerous goods

# **15. REGULATORY INFORMATION**

# **SARA 302 Components**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

# **SARA 313 Components**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

# SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard

# **Massachusetts Right To Know Components**

tert-Butyl-4-methoxyphenol	CAS-No. 25013-16-5	Revision Date 1993-04-24
Pennsylvania Right To Know Components		
tert-Butyl-4-methoxyphenol	CAS-No. 25013-16-5	Revision Date 1993-04-24
New Jersey Right To Know Components		
tert-Butyl-4-methoxyphenol	CAS-No. 25013-16-5	Revision Date 1993-04-24
California Prop. 65 Components WARNING! This product contains a chemical known to the State of California to cause cancer. tert-Butyl-4-methoxyphenol	CAS-No. 25013-16-5	Revision Date 1992-10-16
WARNING! This product contains a chemical known to the State of California to cause cancer. tert-Butyl-4-methoxyphenol	CAS-No. 25013-16-5	Revision Date 1992-10-16

# **16. OTHER INFORMATION**

Acute Tox.

# Full text of H-Statements referred to under sections 2 and 3.

/ touto Tox.	7 touto toxioity
Carc.	Carcinogenicity
Eye Irrit.	Eye irritation
H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
Skin Irrit.	Skin irritation

Acute toxicity

# **HMIS Rating**

Health hazard:	2
Chronic Health Hazard:	*
Flammability:	1
Physical Hazard	0

# **NFPA Rating**

Health hazard:	2
Fire Hazard:	1
Reactivity Hazard:	0

Sigma-Aldrich - B1212000 Page 7 of 8

#### **Further information**

Copyright 2016 Sigma-Aldrich Co. LLC. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

# **Preparation Information**

Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

Version: 5.4 Revision Date: 08/02/2016 Print Date: 11/20/2018

Sigma-Aldrich - B1212000 Page 8 of 8