

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Butylated hydroxytoluene > 99 % for synthesis

Revision date: 05.03.2024

Product code: 26278

Page 1 of 11

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Butylated hydroxytoluene > 99 % for synthesis

REACH Registration Number: 01-2119480433-40-XXXX  
CAS No: 128-37-0  
EC No: 204-881-4

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

#### Use of the substance/mixture

Laboratory chemicals  
Industrial uses: Uses of substances as such or in preparations at industrial sites  
Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

#### Uses advised against

Do not use for private purposes (household).

### 1.3. Details of the supplier of the safety data sheet

Company name: AnalytiChem GmbH  
ACD  
Street: Stempelstraße 6  
Place: D-47167 Duisburg  
Telephone: 0203/5194-0  
Telefax: 0203/5194-290  
E-mail: info@analytichem.de  
Contact person: Abteilung Produktsicherheit  
Telephone: 0203/5194-107/117  
E-mail: produktsicherheit@analytichem.de  
Internet: www.analytichem.de  
Responsible Department: Abteilung Produktsicherheit

### 1.4. Emergency telephone number:

For Hazardous Materials [or Dangerous Goods] Incidents Spill, Leak, Fire, Exposure, or Accident Call CHEMTREC Day or Night Within USA and Canada: 1-800-424-9300 Outside USA and Canada: +1 703-741-5970 (collect calls accepted)

### Further Information

No data available

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Regulation (EC) No 1272/2008

Aquatic Acute 1; H400  
Aquatic Chronic 1; H410

Full text of hazard statements: see SECTION 16.

### 2.2. Label elements

#### Regulation (EC) No 1272/2008

Signal word: Warning

Pictograms:



#### Hazard statements

H410 Very toxic to aquatic life with long lasting effects.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Butylated hydroxytoluene > 99 % for synthesis**

Revision date: 05.03.2024

Product code: 26278

Page 2 of 11

**Precautionary statements**

P273 Avoid release to the environment.  
P391 Collect spillage.

**2.3. Other hazards**

No data available

**SECTION 3: Composition/information on ingredients**

**3.1. Substances**

Sum formula: C15H24O  
Molecular weight: 220,35 g/mol

**Relevant ingredients**

CAS No	Chemical name	Quantity
	EC No	Index No
	REACH No	
	Classification (Regulation (EC) No 1272/2008)	
128-37-0	Butylated hydroxytoluene	100 %
	204-881-4	01-2119480433-40-XXXX
	Aquatic Acute 1, Aquatic Chronic 1; H400 H410	

Full text of H and EUH statements: see section 16.

**Specific Conc. Limits, M-factors and ATE**

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
128-37-0	204-881-4	Butylated hydroxytoluene	100 %
	dermal: LD50 = > 2000 mg/kg; oral: LD50 = > 6000 mg/kg		

**Further Information**

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH), Article 57 above the respective regulatory concentration limit of = 0.1 % (w/w).

**SECTION 4: First aid measures**

**4.1. Description of first aid measures**

**General information**

No data available

**After inhalation**

Provide fresh air.  
Call a doctor if you feel unwell.

**After contact with skin**

Wash immediately with: Water  
Take off immediately all contaminated clothing and wash it before reuse.

**After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water.  
Remove contact lenses, if present and easy to do. Continue rinsing.

**After ingestion**

Rinse mouth immediately and drink plenty of water.  
Call a doctor if you feel unwell.

**4.2. Most important symptoms and effects, both acute and delayed**

No data available

**4.3. Indication of any immediate medical attention and special treatment needed**

No data available

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Butylated hydroxytoluene > 99 % for synthesis

Revision date: 05.03.2024

Product code: 26278

Page 3 of 11

#### SECTION 5: Firefighting measures

##### 5.1. Extinguishing media

###### Suitable extinguishing media

Carbon dioxide (CO<sub>2</sub>)  
Foam  
Extinguishing powder  
Water

###### Unsuitable extinguishing media

no restriction

##### 5.2. Special hazards arising from the substance or mixture

Combustible solids  
Hazardous combustion products  
In case of fire may be liberated: Carbon dioxide (CO<sub>2</sub>) Carbon monoxide  
In case of warming:  
Vapours are heavier than air, spread along floors and form explosive mixtures with air.  
Heating causes rise in pressure with risk of bursting.

##### 5.3. Advice for firefighters

In case of fire: Wear self-contained breathing apparatus.  
In case of fire and/or explosion do not breathe fumes.  
Avoid contact with skin, eyes and clothes.

###### Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.  
Move undamaged containers from immediate hazard area if it can be done safely.  
Use water spray jet to protect personnel and to cool endangered containers.

#### SECTION 6: Accidental release measures

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

###### For non-emergency personnel

Provide adequate ventilation.  
Use personal protection equipment.  
Avoid contact with skin, eyes and clothes.  
Remove persons to safety.  
Emergency procedures  
Do not breathe dust/fume/gas/mist/vapours/spray.

###### For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

##### 6.2. Environmental precautions

Do not allow to enter into surface water or drains.

##### 6.3. Methods and material for containment and cleaning up

###### For containment

Cover drains.  
Prevent spread over a wide area (e.g. by containment or oil barriers).  
Collect in closed and suitable containers for disposal.  
Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

###### For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

###### Other information

Provide adequate ventilation.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Wear breathing apparatus if exposed to vapours/dusts/aerosols.

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Butylated hydroxytoluene > 99 % for synthesis**

Revision date: 05.03.2024

Product code: 26278

Page 4 of 11

**6.4. Reference to other sections**

Safe handling: see section 7  
Personal protection equipment: see section 8  
Disposal: see section 13

**SECTION 7: Handling and storage**

**7.1. Precautions for safe handling**

**Advice on safe handling**

Read label before use. Handle and open container with care.  
When using do not eat, drink, smoke, sniff. Keep container tightly closed.  
Use personal protection equipment. Use extractor hood (laboratory).  
Avoid dust formation. Do not breathe dust.  
Provide adequate ventilation.

**Advice on protection against fire and explosion**

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

**Advice on general occupational hygiene**

Keep away from food, drink and animal feedingstuffs.  
Wash hands and face before breaks and after work and take a shower if necessary.  
When using do not eat or drink.  
Avoid dust formation. Do not breathe dust.

**Further information on handling**

Take off immediately all contaminated clothing and wash it before reuse.  
Wash hands and face before breaks and after work and take a shower if necessary.  
If handled uncovered, arrangements with local exhaust ventilation have to be used.

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

**Requirements for storage rooms and vessels**

Keep container tightly closed.  
Keep container dry.

**Further information on storage conditions**

Protect from sunlight.  
storage temperature +15°C - +25°C

**7.3. Specific end use(s)**

Laboratory chemicals

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

**8.1. Control parameters**

**Occupational exposure limits**

CAS No	Substance	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
128-37-0	2,6-Ditertiary-butyl-para-cresol	-	2		TWA (8 h)	

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Butylated hydroxytoluene > 99 % for synthesis**

Revision date: 05.03.2024

Product code: 26278

Page 5 of 11

**DNEL/DMEL values**

CAS No	Substance		
DNEL type	Exposure route	Effect	Value
128-37-0	Butylated hydroxytoluene		
Consumer DNEL, long-term	dermal	systemic	0,25 mg/kg bw/day
Worker DNEL, long-term	inhalation	systemic	3,5 mg/m <sup>3</sup>
Worker DNEL, long-term	dermal	systemic	0,5 mg/kg bw/day
Consumer DNEL, long-term	inhalation	systemic	0,86 mg/m <sup>3</sup>

**PNEC values**

CAS No	Substance	
Environmental compartment	Value	
128-37-0	Butylated hydroxytoluene	
Freshwater	0,000199 mg/l	
Freshwater (intermittent releases)	0,00199 mg/l	
Marine water	0,00002 mg/l	
Freshwater sediment	0,0996 mg/kg	
Marine sediment	0,00996 mg/kg	
Secondary poisoning	8,33 mg/kg	
Micro-organisms in sewage treatment plants (STP)	0,17 mg/l	
Soil	0,04769 mg/kg	

**8.2. Exposure controls**

**Appropriate engineering controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection**

goggles  
Face protection umbrella

**Hand protection**

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Protective gloves are recommended Company KCL GmbH, D-36124 Eichenzell, email: [vertrieb@kcl.de](mailto:vertrieb@kcl.de) With specification (test according to EN374):

By long-term hand contact

Trade name/designation: KCL 741 Dermatril® L  
Recommended material: NBR (Nitrile rubber) 0,11 mm  
Wearing time with permanent contact: > 480 min

By short-term hand contact

Trade name/designation: KCL 741 Dermatril® L

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Butylated hydroxytoluene > 99 % for synthesis

Revision date: 05.03.2024

Product code: 26278

Page 6 of 11

Recommended material: NBR (Nitrile rubber) 0,11 mm  
Wearing time with occasional contact (splashes): > 480 min

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. 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 EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: www.kcl.de).

#### Skin protection

Wear fire resistant or flame retardant clothing.  
Take off immediately all contaminated clothing and wash it before reuse.  
Wear suitable protective clothing. Take off immediately all contaminated clothing.  
Wash hands and face before breaks and after work and take a shower if necessary.

#### Respiratory protection

Wear breathing apparatus if exposed to vapours/dusts/aerosols.  
Filtering device with filter or ventilator filtering device of type: A-(P2)

#### Environmental exposure controls

Do not allow to enter into surface water or drains.  
Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.  
Danger of explosion

## SECTION 9: Physical and chemical properties

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

Physical state:	solid
Colour:	white
Odour:	odourless
Odour threshold:	No data available
Melting point/freezing point:	69-70 °C
Boiling point or initial boiling point and boiling range:	265 °C
Flammability:	No data available
Lower explosion limits:	No data available
Upper explosion limits:	No data available
Flash point:	127 °C
Auto-ignition temperature:	345 °C
Decomposition temperature:	No data available
pH-Value:	No data available
Viscosity / kinematic: (at 20 °C)	6,2 mm <sup>2</sup> /s
Water solubility: (at 25 °C)	<0,001 g/L
Solubility in other solvents	No data available
Dissolution rate:	No data available
Partition coefficient n-octanol/water:	No data available
Dispersion stability:	No data available
Vapour pressure: (at 20 °C)	0,02 hPa
Vapour pressure: (at 100 °C)	2,4 hPa
Density (at 20 °C):	1,05 g/cm <sup>3</sup>
Relative density:	No data available

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Butylated hydroxytoluene > 99 % for synthesis

Revision date: 05.03.2024

Product code: 26278

Page 7 of 11

Bulk density:	450 kg/m <sup>3</sup>
Relative vapour density:	No data available
Particle characteristics:	No data available

#### 9.2. Other information

##### Information with regard to physical hazard classes

###### Explosive properties

In case of warming:

Vapours are heavier than air, spread along floors and form explosive mixtures with air.

Sustaining combustion:

No data available

Self-ignition temperature

Solid:

No data available

Gas:

No data available

Oxidizing properties

No data available

##### Other safety characteristics

Evaporation rate:

No data available

Solvent separation test:

No data available

Solvent content:

100%

Solid content:

No data available

Sublimation point:

No data available

Softening point:

No data available

Pour point:

No data available

Viscosity / dynamic:

5,85 mPa·s

(at 20 °C)

Flow time:

No data available

##### Further Information

No data available

## SECTION 10: Stability and reactivity

#### 10.1. Reactivity

In case of warming:

Vapours may form explosive mixtures with air.

Danger of dust explosion.

#### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

#### 10.3. Possibility of hazardous reactions

Oxidising agent

Peroxides

Alkali (lye)

Acid

Acid chlorides, inorganic

#### 10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

#### 10.5. Incompatible materials

Copper

Copper alloys

Brass

Steel

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Butylated hydroxytoluene > 99 % for synthesis**

Revision date: 05.03.2024

Product code: 26278

Page 8 of 11

**10.6. Hazardous decomposition products**

No data available

**Further information**

No data available

**SECTION 11: Toxicological information**

**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

**Toxicokinetics, metabolism and distribution**

No data available

**Acute toxicity**

Based on available data, the classification criteria are not met.

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
128-37-0	Butylated hydroxytoluene				
	oral	LD50 > 6000 mg/kg	Rat	Study report (1989)	OECD Guideline 401
	dermal	LD50 > 2000 mg/kg	Rat	Study report (1988)	OECD Guideline 402

**Irritation and corrosivity**

Based on available data, the classification criteria are not met.

**Sensitising effects**

Based on available data, the classification criteria are not met.

**Carcinogenic/mutagenic/toxic effects for reproduction**

Based on available data, the classification criteria are not met.

**STOT-single exposure**

Based on available data, the classification criteria are not met.

**STOT-repeated exposure**

Based on available data, the classification criteria are not met.

**Aspiration hazard**

Based on available data, the classification criteria are not met.

**Information on likely routes of exposure**

No data available

**Specific effects in experiment on an animal**

No data available

**Additional information on tests**

No data available

**Practical experience**

No data available

**11.2. Information on other hazards**

**Endocrine disrupting properties**

No data available

**Other information**

No data available

**Further information**

No data available

**SECTION 12: Ecological information**



**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Butylated hydroxytoluene > 99 % for synthesis**

Revision date: 05.03.2024

Product code: 26278

Page 9 of 11

**12.1. Toxicity**

Very toxic to aquatic life.

Very toxic to aquatic life with long lasting effects.

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
128-37-0	Butylated hydroxytoluene					
	Acute fish toxicity	LC50 mg/l	0,199	96 h	Oryzias latipes	REACH Registration Dossier
	Acute algae toxicity	ErC50 mg/l	0,758	96 h	Pseudokirchneriella subcapitata	REACH Registration Dossier
	Acute crustacea toxicity	EC50 mg/l	0,48	48 h	Daphnia magna	REACH Registration Dossier
	Fish toxicity	NOEC mg/l	0,053	30 d	Oryzias latipes	REACH Registration Dossier
	Crustacea toxicity	NOEC mg/l	0,069	21 d	Daphnia magna	REACH Registration Dossier
	Acute bacteria toxicity	EC50 mg/l ( )	> 10000	3 h	Activated sludge	Study report (2000)

**12.2. Persistence and degradability**

< 10 %; 20 d

Not readily biodegradable (according to OECD criteria)

**12.3. Bioaccumulative potential**

Bioaccumulative potential

**Partition coefficient n-octanol/water**

CAS No	Chemical name	Log Pow
128-37-0	Butylated hydroxytoluene	5,03

**BCF**

CAS No	Chemical name	BCF	Species	Source
128-37-0	Butylated hydroxytoluene	598,4	Cyprinus carpio	REACH Registration D

**12.4. Mobility in soil**

No data available

**12.5. Results of PBT and vPvB assessment**

This substance does not meet the PBT/vPvB criteria of REACH, annex XIII.

**12.6. Endocrine disrupting properties**

This substance does not have endocrine disrupting properties with respect to non-target organisms.

**12.7. Other adverse effects**

Avoid release to the environment.

**Further information**

Do not allow to enter into surface water or drains.

**SECTION 13: Disposal considerations**

**13.1. Waste treatment methods**

**Safety Data Sheet**

according to Regulation (EC) No 1907/2006

**Butylated hydroxytoluene > 99 % for synthesis**

Revision date: 05.03.2024

Product code: 26278

Page 10 of 11

**Disposal recommendations**

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.  
Send to a physico-chemical treatment facility under observation of official regulations.  
Do not empty into drains.

**Contaminated packaging**

Handle contaminated packages in the same way as the substance itself.  
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

**SECTION 14: Transport information**

**Land transport (ADR/RID)**

**14.1. UN number or ID number:** UN 3077  
**14.2. UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 (Butylated hydroxytoluene)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III  
 Hazard label: 9  
 Classification code: M7  
 Special Provisions: 274 335 375 601  
 Limited quantity: 5 kg  
 Excepted quantity: E1  
 Transport category: 3  
 Hazard No: 90  
 Tunnel restriction code: -

**Inland waterways transport (ADN)**

**14.1. UN number or ID number:** UN 3077  
**14.2. UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 (Butylated hydroxytoluene)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III  
 Hazard label: 9  
 Classification code: M7  
 Special Provisions: 274 335 375 601  
 Limited quantity: 5 kg  
 Excepted quantity: E1

**Marine transport (IMDG)**

**14.1. UN number or ID number:** UN 3077  
**14.2. UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 (Butylated hydroxytoluene)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III  
 Hazard label: 9  
 Special Provisions: 274, 335, 966, 967, 969  
 Limited quantity: 5 kg  
 Excepted quantity: E1  
 EmS: F-A, S-F

**Air transport (ICAO-TI/IATA-DGR)**

**14.1. UN number or ID number:** UN 3077  
**14.2. UN proper shipping name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.  
 (Butylated hydroxytoluene)  
**14.3. Transport hazard class(es):** 9  
**14.4. Packing group:** III

## Safety Data Sheet

according to Regulation (EC) No 1907/2006

### Butylated hydroxytoluene > 99 % for synthesis

Revision date: 05.03.2024

Product code: 26278

Page 11 of 11

Hazard label:	9	
Special Provisions:	A97 A158 A179 A197	
Limited quantity Passenger:	30 kg G	
Passenger LQ:	Y956	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:		956
IATA-max. quantity - Passenger:		400 kg
IATA-packing instructions - Cargo:		956
IATA-max. quantity - Cargo:		400 kg

#### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS:	Yes
Danger releasing substance:	Butylated hydroxytoluene

#### 14.6. Special precautions for user

No dangerous good in sense of this transport regulation.

#### 14.7. Maritime transport in bulk according to IMO instruments

No dangerous good in sense of this transport regulation.

### SECTION 15: Regulatory information

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

##### EU regulatory information

Information according to Directive 2012/18/EU (SEVESO III): E1 Hazardous to the Aquatic Environment

##### National regulatory information

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).  
Water hazard class (D): 2 - obviously hazardous to water

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 12.

#### Abbreviations and acronyms

Aquatic Acute: Acute aquatic hazard  
Aquatic Chronic: Chronic aquatic hazard

#### Relevant H and EUH statements (number and full text)

H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

#### Further Information

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material. The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.  
The receiver of our product is singularly responsible for adhering to existing laws and regulations.