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

1.1. Product identifier

Butylhydroxytoluenum

Item No. 06200000

Registration no.

Registration no. 01-2119565113-46-0000

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

Use of the substance/preparation

Raw material for pharmaceutical production and analysis , Chemical for synthesis

1.3. Details of the supplier of the safety data sheet

Address/Manufacturer

Hänseler AG
Industriestrasse 35
9100 Herisau

Telephone no.	0041 (0)71 353 58 58
E-mail address of person responsible for this SDS	sdb@haenseler.ch

1.4. Emergency telephone number

Switzerland :145 / Abroad +41 (0)44 251 51 51

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (Regulation (EC) No. 1272/2008)

Classification (Regulation (EC) No. 1272/2008)

Aquatic Chronic 1 H410

The product is classified and labelled in accordance with Regulation (EC) No 1272/2008
For explanation of abbreviations see section 16.

2.2. Label elements

Labelling according to regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Warning

Hazard statements

H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements

P273	Avoid release to the environment.
P391	Collect spillage.
P501.3	Disposal in compliance with local and national regulations.

2.3. Other hazards

The Substance does not meet PBT-criteria. This substance does not meet the vPvB-criteria. This substance does not have endocrine disrupting properties with respect to humans. This substance does not have endocrine disrupting properties with respect to non-target organisms.

SECTION 3: Composition/information on ingredients

Molecular weight

Value 220.36 g/mol

Hazardous ingredients

2,6-Di-tert-butyl-p-cresol

CAS No. 128-37-0
EINECS no. 204-881-4
Concentration >= 50 %
Classification (Regulation (EC) No. 1272/2008)
Aquatic Chronic 1 H410

Concentration limits (Regulation (EC) No. 1272/2008)
Aquatic Chronic 1 M = 1

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

If you feel unwell, seek medical advice (show the label where possible).

After inhalation

Remove the casualty into fresh air and keep him calm. Irregular breathing/no breathing: artificial respiration. Seek medical advice immediately.

After skin contact

Wash off immediately with soap and water and rinse well. Seek medical advice immediately.

After eye contact

In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. Seek medical advice immediately.

After ingestion

Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Seek medical advice immediately.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Water mist, Alcohol-resistant foam, Dry chemical extinguisher, Carbon dioxide

5.2. Special hazards arising from the substance or mixture

Carbon monoxide (CO); Carbon dioxide (CO2)

5.3. Advice for firefighters

Special protective equipment for fire-fighting

Use self-contained breathing apparatus.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Avoid dust formation. Do not inhale vapours. Ensure adequate ventilation. Do not inhale dust.

6.2. Environmental precautions

Do not empty into drains.

6.3. Methods and material for containment and cleaning up

Take up mechanically and collect in suitable container for disposal.

6.4. Reference to other sections

Information regarding waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Avoid contact with skin and eyes. Avoid formation of aerosols. Avoid dust formation. Provide suitable exhaust ventilation at processing machines.

7.2. Conditions for safe storage, including any incompatibilities

Storage classes

Storage class according to TRGS 510	13	Non- combustible solids
Storage category (Switzerland)	11/13	Other solid hazardous substances with classification/labelling hazardous

Further information on storage conditions

Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values

2,6-Di-tert-butyl-p-cresol

List	SUVA	
Type	MAK	
Value	10	mg/m³
Short term exposure limit	40	mg/m³

Pregnancy group: S; Remarks: SSc; KG, Leber

Derived No/Minimal Effect Levels (DNEL/DMEL)

2,6-Di-tert-butyl-p-cresol

Type of value	Derived No Effect Level (DNEL)	
Reference group	Worker	
Duration of exposure	Long term	
Route of exposure	inhalative	
Mode of action	Systemic effects	
Concentration	3.5	mg/m³

Type of value	Derived No Effect Level (DNEL)
Reference group	Worker
Duration of exposure	Short term
Route of exposure	dermal

Mode of action	Systemic effects	
Concentration	0.5	mg/kg

Predicted No Effect Concentration (PNEC)

2,6-Di-tert-butyl-p-cresol

Type of value	PNEC	
Type	Freshwater	
Concentration	0.199	µg/l
Type of value	PNEC	
Type	Saltwater	
Concentration	0.0199	µg/l
Type of value	PNEC	
Type	Water	
Conditions	Intermittend	
Concentration	1.99	µg/l
Type of value	PNEC	
Type	Sediment	
Concentration	0.0996	mg/kg
Type of value	PNEC	
Type	Marine sediment	
Concentration	0.0096	mg/kg
Type of value	PNEC	
Type	Soil	
Concentration	0.04769	mg/kg

8.2. Exposure controls

General protective and hygiene measures

Observe the usual precautions for handling chemicals. Wash hands and face before breaks and after work.

Respiratory protection

combination filter A-P2

Hand protection

The glove material must be sufficient impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well ventilated location.

Use	Permanent hand contact	
Appropriate Material	nitrile rubber - NBR	
Material thickness	0.11	mm
Breakthrough time	480	min

Hand protection must comply with EN 374.

Use	Short-term hand contact	
Appropriate Material	nitrile rubber - NBR	
Material thickness	0.11	mm
Breakthrough time	480	min

Eye protection

Safety glasses with side protection shield; Eye protection must comply with EN 166.

Body protection

Clothing as usual in the chemical industry.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state crystals

Colour white

Odour odourless

Melting point

Value	69.8	°C

Boiling point or initial boiling point and boiling range

Value	265	°C
Pressure	1013 hPa	

Flash point

Value	127.0	°C
Method	Cleveland open cup - COC	

Ignition temperature

Value	> 400	°C
Method	440/2008/EC, A.16	

Viscosity

Value	3.47	mm²/s
Temperature	80 °C	

Partition coefficient n-octanol/water (log value)

Reference substance	2,6-Di-tert-butyl-p-cresol

Vapour pressure

Value	0	hPa
Temperature	25 °C	
Method	OECD 104	

Density and/or relative density

Value	1.03	g/cm³
Temperature	20 °C	

Relative vapour density

Remarks	No data available

9.2. Other information

Solubility in water

Value	0.76	g/l
Temperature	20 °C	
Method	OECD 105	
Remarks	slightly soluble	

Bulk density

Value	450	kg/m³

SECTION 10: Stability and reactivity

10.1. Reactivity

Accumulation of fine dust may entail the risk of a dust explosion in the presence of air. heat

10.2. Chemical stability

No decomposition if stored and applied as directed.

10.3. Possibility of hazardous reactions

Possible incompatibility with materials lister under section 10.5.

10.4. Conditions to avoid

Heat

10.5. Incompatible materials

Incompatible with acid chlorides and acid anhydrides. Oxidising agents, Bases, Corrodes copper and brass. Acids, Reaction with Sulfuric acid. peroxides, Alkalies

10.6. Hazardous decomposition products

In the event of fire the following can be released: Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

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

Acute oral toxicity (Components)

2,6-Di-tert-butyl-p-cresol

Species	Rats (male/female)	
LD50	> 6000	mg/kg
Method	OECD 401	

Acute dermal toxicity (Components)

2,6-Di-tert-butyl-p-cresol

Species	Rats (male/female)	
LD50	> 2000	mg/kg
Method	OECD 402	

Acute inhalative toxicity (Components)

2,6-Di-tert-butyl-p-cresol

Remarks	No data available.

Skin corrosion/irritation (Components)

2,6-Di-tert-butyl-p-cresol

Species	rabbit	
Duration of exposure	4	h
evaluation	non-irritant	
Method	OECD 404	

Serious eye damage/irritation (Components)

2,6-Di-tert-butyl-p-cresol

Species	rabbit
evaluation	non-irritant
Method	OECD 405

Sensitization (Components)

2,6-Di-tert-butyl-p-cresol

evaluation	non-sensitizing
Method	in vitro
Source	ECHA

Subacute, subchronic, chronic toxicity (Components)

2,6-Di-tert-butyl-p-cresol

Remarks	No data available

Mutagenicity (Components)

2,6-Di-tert-butyl-p-cresol

Species	Salmonella typhimurium
evaluation	No mutagenicity in the Ames-test.

Remarks	negative

2,6-Di-tert-butyl-p-cresol

Route of exposure	intraperitoneal
Species	mouse
evaluation	No mutagenicity in the micronucleus test.

2,6-Di-tert-butyl-p-cresol

Route of exposure	oral
Species	rat (male)
Remarks	negative

Reproduction toxicity (Components)

2,6-Di-tert-butyl-p-cresol

Remarks	No data available.

Carcinogenicity (Components)

2,6-Di-tert-butyl-p-cresol

Remarks	No evidence available on carcinogenicity.

Specific Target Organ Toxicity (STOT) (Components)

2,6-Di-tert-butyl-p-cresol

Remarks	No data available.

11.2 Information on other hazards

Endocrine disrupting properties with respect to humans

This substance does not have endocrine disrupting properties with respect to humans.

SECTION 12: Ecological information ***

12.1. Toxicity

Fish toxicity (Components)

2,6-Di-tert-butyl-p-cresol

Species	Oryzias latipes		
LC50	5.3		mg/l

2,6-Di-tert-butyl-p-cresol

Species	zebra fish (Brachydanio rerio)		
LC50	> 0.57		mg/l
Duration of exposure	96	h	
Method	Directive 67/548/EEC, Annex V, C.1.		

2,6-Di-tert-butyl-p-cresol

Species	Oryzias latipes		
NOEC	0.053		mg/l
Duration of exposure	30	d	
Method	OECD 210		

Daphnia toxicity (Components)

2,6-Di-tert-butyl-p-cresol

Species	Daphnia magna		
EC50	0.48		mg/l
Duration of exposure	48	h	
Method	OECD 202		

2,6-Di-tert-butyl-p-cresol

Species	Daphnia magna		
EC50	0.096		mg/l
Duration of exposure	21	d	
Method	OECD 211		

Algae toxicity (Components)

2,6-Di-tert-butyl-p-cresol

Species	Desmodesmus subspicatus		
ErC50	>	0.4	mg/l
Duration of exposure		72 h	
Method	Regulation (EC) No. 440/2008, Annex, C.3		

2,6-Di-tert-butyl-p-cresol

Species	Desmodesmus subspicatus		
EC10		0.4	mg/l
Duration of exposure		72 h	

2,6-Di-tert-butyl-p-cresol

ErC50	>	0.24	mg/l
Duration of exposure		72 h	
Method	OECD 201		

Bacteria toxicity (Components)

2,6-Di-tert-butyl-p-cresol

Species	activated sludge		
EC50	>	10000	mg/l
Duration of exposure		3 h	
Method	OECD 209		

12.2. Persistence and degradability

Physico-chemical eliminability (Components)

2,6-Di-tert-butyl-p-cresol

Remarks: No data available.

Biodegradability (Components)

2,6-Di-tert-butyl-p-cresol

Value	<	10	%
Duration of test		20 d	
evaluation	not readily degradable		
Method	OECD 301D		

Ready degradability (Components)

2,6-Di-tert-butyl-p-cresol

Remarks: Not readily biodegradable.

12.3. Bioaccumulative potential

Partition coefficient n-octanol/water (log value)

Reference substance: 2,6-Di-tert-butyl-p-cresol

Octanol/water partition coefficient (log Pow) (Components)

2,6-Di-tert-butyl-p-cresol

log Pow	5.1
Remarks	Due to the distribution coefficient n-octanol/water, accumulation in organisms is possible.

12.4. Mobility in soil

Mobility in soil (Components)

2,6-Di-tert-butyl-p-cresol

The product is insoluble and sinks in water.

2,6-Di-tert-butyl-p-cresol

Adsorbs on soil.

2,6-Di-tert-butyl-p-cresol
Immobile

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment ***

The Substance does not meet PBT-criteria.
This substance does not meet the vPvB-criteria.

12.6 Endocrine disrupting properties

Endocrine disrupting properties with respect to the envrionment

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

12.7. Other adverse effects

General information / ecology

Toxic for aquatic organismes.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations for the product

Disposal in compliance with local and national regulations.

Disposal recommendations for packaging

Dispose of as unused product.

SECTION 14: Transport information

	Land transport ADR/RID	Marine transport IMDG/GGVSee	Air transport ICAO/IATA
Tunnel restriction code	-		
14.1. UN number	3077	3077	3077
14.2. UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,6-Di-tert-butyl-p-cresol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,6-Di-tert-butyl-p-cresol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,6-Di-tert-butyl-p-cresol)
14.3. Transport hazard class(es)	9	9	9
Label			
14.4. Packing group	III	III	III
Limited Quantity	5 kg		
Transport category	3		
14.5. Environmental hazards	 ENVIRONMENTALLY HAZARDOUS	Marine Pollutant 	 ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

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

Water Hazard Class (Germany)

Water Hazard Class (Germany)	WGK 2
Remarks	Derivation of WGK according to Annex 1 No. 5.2 AwSV

15.2. Chemical safety assessment

For this substance a chemical safety assessment has been carried out.

SECTION 16: Other information

Hazard statements listed in Chapter 3

H410	Very toxic to aquatic life with long lasting effects.

CLP categories listed in Chapter 3

Aquatic Chronic 1	Hazardous to the aquatic environment, chronic, Category 1

Supplemental information

Relevant changes compared with the previous version of the safety data sheet are marked with: ***

This information is based on our present state of knowledge. However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.