Butylated Hydroxytoluene

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 10/16/2015

SECTION 1: Identification of the substance/mixture

1.1. Product identifier

Product form	:	Substance
Substance name	:	Butylated Hydroxytoluene
Formula	:	$C_{15}H_{24}O$
Molecular weight	:	220.36 g/mol
CAS No.	:	128-37-0
Product code	:	LW-BHT
Synonyms	:	BHT, Butylhydroxytoluene.

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

Use of the substance/mixture	:	Laboratory chemicals, Synthesis of substances

1.3. Emergency telephone number

Emergency number	:	1.800.424.9300 (USA) +1.703.527.3887 (INT)

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

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

Acute aquatic toxicity (Category 1), H400

Chronic aquatic toxicity (Category 1), H410

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

2.2. GHS Label elements, including precautionary statements

Pictogram :

Signal word : Warning

Hazard statement(s)

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

Precautionary statement(s)

P273 : Avoid release to the environment.

P391 : Collect spillage.

P501 : Dispose of contents/ container to an approved waste disposal plant.

2.3. Hazards not otherwise classified (HNOC) or not covered by GHS

none

SECTION 3: Composition/information on ingredients

3.1. Substances

Synonyms : $C_{15}H_{24}O$

Synonyms : BHT, Butylhydroxytoluene.

Molecular Weight : 220.36 g/mol

CAS-No. : 128-37-0

Hazardous components

Component	Classification	Concentration
2,6-di-tert-Butyl-p-cresol	Aquatic Acute 1; Aquatic Chronic 1; H410	<= 100 %

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

SECTION 4: Description of 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.

First-aid measures after inhalation : If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

First-aid measures after skin contact : Wash off with soap and plenty of water. Consult a physician.

First-aid measures after eye contact : Flush eyes with water as a precaution.

First-aid measures after ingestion : 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.

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

No data available

SECTION 5: Firefighting measures

5.1. Extinguishing media

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

5.2. Special hazards arising from the substance or mixture

Carbon oxides

5.3. Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4. More Information

No data available

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

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. Discharge into the environment must be avoided.

6.3. Methods and material 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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Further processing of solid materials may result in the formation of combustible dusts. The potential for combustible dust formation should be taken into consideration before additional processing occurs.

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.

Storage class (TRGS 510): 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

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
2,6-di-tert-Butyl-p-cresol	128-37-0	TWA	2.000000 mg/m3	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract irritation Not classifiable as a human carcinogen		
		TWA	10.000000 mg/m3	USA. NIOSH Recommended Exposure Limits

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.

8.3. Personal protective equipment

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

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 : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection : Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environmental exposure controls : Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance : Form: powder

		Color: white
Odor	:	No data available
Odor Threshold	:	No data available
pH	:	No data available
Melting point/freezing point	:	69.0 - 70.0 °C (156.2 - 158.0 °F)
Initial boiling point and boiling range	:	265.0 °C (509.0 °F)
Flash point	:	127.0 °C (260.6 °F) - closed cup
Evaporation rate	:	No data available
Flammability (solid, gas)	:	No data available
Upper/lower flammability or explosive limits	:	No data available
Vapor pressure	:	0.01 hPa (0.01 mmHg) at 20.0 °C (68.0 °F)
Vapor density	:	No data available
Relative density	:	1.05 g/cm3 at 20 °C (68 °F)
Water solubility	:	0.0004 g/l at 20 °C (68 °F) - slightly soluble
Partition coefficient: n-octanol/water	:	log Pow: 5.1
Auto-ignition temperature	:	470.0 °C (878.0 °F)
Decomposition temperature	:	No data available
Viscosity	:	3.47 mm2/s at 80 °C (176 °F) -
Explosive properties	:	No data available
Oxidizing properties	:	No data available

9.2. Other safety information

Solubility in other solvents	:	Toluene - soluble Methanol - soluble Acetone - soluble
Dissociation constant	:	12.2

SECTION 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

Potassium, Acid anhydrides

10.6. Hazardous decomposition products

In the event of fire: see section 5

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	:	LD50 Oral - Rat - male and female - > 6,000 mg/kg (OECD Test Guideline 401) Inhalation: No data available LD50 Dermal - Rat - male and female - > 2,000 mg/kg (OECD Test Guideline 402) No data available
Skin corrosion/irritation	:	No data available
Serious eye damage/irritation	:	Eyes - Rabbit Result: No eye irritation (Read-across (Analogy))
Respiratory or skin sensitization	:	No data available
Germ cell mutagenicity	:	Ames test S. typhimurium Result: negative Mouse - male and female Result: negative

Carcinogenicity

This product is or contains a component that is not classifiable as to its carcinogenicity based on its IARC, ACGIH, NTP, or EPA classification.

IARC:	:	3 - Group 3: Not classifiable as to its carcinogenicity to humans (2,6-di-tert-Butyl-p-cresol)
NTP:	:	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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.
Reproductive toxicity	:	No data available
Specific target organ toxicity (single exposure)	:	No data available
Specific target organ toxicity (repeated exposure)	:	No data available
Aspiration hazard	:	No data available
Additional Information	:	Repeated dose toxicity Rat - male and female - Oral - NOAEL : 25 mg/kg RTECS: Not available To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish	:	LC50 - Oryzias latipes - 5.3 mg/l - 48 h
Toxicity to daphnia and other aquatic invertebrates	:	static test EC50 - Daphnia magna (Water flea) - 0.48 mg/l - 48 h (OECD Test Guideline 202)
Toxicity to bacteria	:	Growth inhibition EC50 - Protozoa - 1.7 mg/l - 24 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. Results of PBT and vPvB assessment	:	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
12.6. Other adverse effects	:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product	:	Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated Packaging	:	Dispose of as unused product.

SECTION 14: Transport information

DOT(US)

Not dangerous goods

IMDG

UN number	:	3077
Class	:	9
Packing group	:	III
EMS-No	:	F-A, S-F
Proper shipping name	:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,6-di-tert-Butyl-p-cresol)
Marine pollutant	:	yes

IATA

UN number	:	3077
Class	:	9
Packing group	:	III
EMS-No		F-A, S-A
Proper shipping name	:	Environmentally hazardous substance, solid, n.o.s. (2,6-di-tert-Butyl-p-cresol)

IATA

EHS-Mark required (ADR 2.2.9.1.10, IMDG code 2.10.3) for single packaging's and combination packaging's containing inner packaging's with Dangerous Goods > 5L for liquids or > 5kg for solids.

SECTION 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

No SARA Hazards

Massachusetts Right To Know Components

2,6-di-tert-Butyl-p-cresol	CAS-No.	Revision Date

	128-37-0	1993-04-24

Pennsylvania Right To Know Components

2,6-di-tert-Butyl-p-cresol	CAS-No.	Revision Date
	128-37-0	1993-04-24

New Jersey Right To Know Components

2,6-di-tert-Butyl-p-cresol	CAS-No.	Revision Date
	128-37-0	1993-04-24

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

SECTION 16: Other information

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

Aquatic Acute	:	Acute aquatic toxicity
Aquatic Chronic	:	Chronic aquatic toxicity
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.

HMIS Rating

Health Hazard	:	0
Chronic Health Hazard	:	
Flammability	:	1
Physical Hazard	:	0

NFPA Rating

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

Further Information

Information in this SDS is from available published sources and is believed to be accurate. No warranty, express or implied, is made and Loudwolf Holdings Ltd. assumes no liability resulting from the use of this SDS. The user must determine suitability of this information for his/her application.