

# SAFETY DATA SHEET

Creation Date 09-Mar-2010 Revision Date 9-Jul-2022 Revision Number 2

1. Identification

Product Name 2,6-Di-tert-butyl-4-methylphenol

Cat No.: C1859

Synonyms BHT; Butylated hydroxytoluene; DBPC; Ionol; 2,6-Di-tert-butyl-p-cresol

Recommended Use Laboratory chemicals.

Uses advised against No Information available

Details of the supplier of the safety data sheet

Company Emergency Telephone Number

Lab Alley LLC
22111 Highway 71 West, Suite 601
Spicewood, Texas 78669
Infotrac: 800-535-5053

Tel.: 512-668-9918

# 2. Hazard(s) identification

## Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Specific target organ toxicity (single exposure) Category 3

Target Organs - Respiratory system.

Specific target organ toxicity - (repeated exposure) Category 2

Target Organs - Liver, Kidney, Blood.

### Label Elements

# Signal Word

Warning

#### **Hazard Statements**

May cause respiratory irritation
May cause damage to organs through prolonged or repeated exposure



#### **Precautionary Statements**

### 2,6-Di-tert-butyl-4-methylphenol

#### Prevention

Do not breathe dust/fume/gas/mist/vapors/spray Use only outdoors or in a well-ventilated area

#### Response

Get medical attention/advice if you feel unwell

#### Inhalation

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Call a POISON CENTER or doctor/physician if you feel unwell

#### Storage

Store in a well-ventilated place. Keep container tightly closed

Store locked up

### Disposal

Dispose of contents/container to an approved waste disposal plant

### Hazards not otherwise classified (HNOC)

Very toxic to aquatic life with long lasting effects

# 3. Composition / information on ingredients

Component	CAS-No	Weight %		
2,6-Di-tert-butyl-p-cresol	128-37-0	>95		

## 4. First-aid measures

**General Advice** If symptoms persist, call a physician.

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Obtain medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.

Ingestion Clean mouth with water and drink afterwards plenty of water. Get medical attention if

symptoms occur.

Most important symptoms/effects

**Notes to Physician** 

None reasonably foreseeable.

Treat symptomatically

## 5. Fire-fighting measures

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

Unsuitable Extinguishing Media No information available

Flash Point 127 °C / 260.6 °F

Method - No information available

**Autoignition Temperature** 

345 °C / 653 °F

**Explosion Limits** 

Upper No data available
Lower No data available
Sensitivity to Mechanical Impact No information available
Sensitivity to Static Discharge No information available

#### **Specific Hazards Arising from the Chemical**

Do not allow run-off from fire fighting to enter drains or water courses.

#### **Hazardous Combustion Products**

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Carbon monoxide (CO) Carbon dioxide (CO2)

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
2	1	0	N/A

# Accidental release measures

#### **Personal Precautions Environmental Precautions**

Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. Do not flush into surface water or sanitary sewer system. Do not allow material to contaminate ground water system. Prevent product from entering drains, Local authorities should be advised if significant spillages cannot be contained. See Section 12 for additional ecological information. Avoid release to the environment. Collect spillage.

Up

Methods for Containment and Clean Sweep up or vacuum up spillage and collect in suitable container for disposal. Keep in suitable, closed containers for disposal.

# 7. Handling and storage

Handling

Wear personal protective equipment. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation.

Storage

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

# 8. Exposure controls / personal protection

#### **Exposure Guidelines**

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
2,6-Di-tert-butyl-p-cresol	TWA: 2 mg/m <sup>3</sup>	(Vacated) TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>
	-		

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
2,6-Di-tert-butyl-p-cresol	STEL: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>	TWA: 2 mg/m <sup>3</sup>
		STEL: 20 mg/m <sup>3</sup>	

Legend

ACGIH - American Conference of Governmental Industrial Hygienists

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

**Engineering Measures** Ensure that eyewash stations and safety showers are close to the workstation location.

Ensure adequate ventilation, especially in confined areas.

**Personal Protective Equipment** 

**Eye/face Protection** Wear appropriate protective eveglasses or chemical safety googles as described by

OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard

EN166.

Long sleeved clothing. Skin and body protection

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard Respiratory Protection

EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures** Handle in accordance with good industrial hygiene and safety practice.

# Physical and chemical properties

### 2,6-Di-tert-butyl-4-methylphenol

Physical State Solid Appearance White

Odor Slight phenolic

Odor Threshold<br/>pHNo information available<br/>No information available

 Melting Point/Range
 69 - 71 °C / 156.2 - 159.8 °F

 Boiling Point/Range
 265 °C / 509 °F @ 760 mmHg

Flash Point 127 °C / 260.6 °F Evaporation Rate Not applicable

Flammability (solid, gas)

No information available

Flammability or explosive limits

Upper No data available
Lower No data available
Vapor Pressure 0.02 mbar @ 20 °C
Vapor Density Not applicable

Vapor Density
Specific Gravity
Solubility
Not applicable
No information available
Insoluble in water

Partition coefficient; n-octanol/water

Autoignition Temperature

No data available
345 °C / 653 °F

Decomposition Temperature No information available

ViscosityNot applicableMolecular FormulaC15 H24 OMolecular Weight220.35

# 10. Stability and reactivity

Reactive Hazard None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Incompatible products. Excess heat. Avoid dust formation.

Incompatible Materials Strong oxidizing agents, Strong acids, Bases, Acid chlorides, Acid anhydrides, copper,

Copper alloys, Peroxides

Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous Reactions None under normal processing.

# 11. Toxicological information

#### **Acute Toxicity**

### **Product Information**

**Component Information** 

Component LD50 Oral		LD50 Dermal	LC50 Inhalation		
	2,6-Di-tert-butyl-p-cresol	>2000 mg/kg ( Rat )	>2000 mg/kg ( Rat )	Not listed	

Toxicologically Synergistic No information available

**Products** 

Delayed and immediate effects as well as chronic effects from short and long-term exposure

IrritationNo information availableSensitizationNo information available

**Carcinogenicity** The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
2,6-Di-tert-butyl-p-cres	128-37-0	Not listed				

ol |

Mutagenic Effects Mutagenic effects have occurred in humans. Not mutagenic in AMES Test

**Reproductive Effects** Experiments have shown reproductive toxicity effects on laboratory animals.

**Developmental Effects** No information available.

**Teratogenicity** No information available.

**STOT - single exposure**STOT - repeated exposure
Respiratory system
Liver Kidney Blood

Aspiration hazard No information available

Symptoms / effects,both acute and No information available

delayed

**Endocrine Disruptor Information** No information available

Other Adverse Effects The toxicological properties have not been fully investigated. See actual entry in RTECS for

complete information.

# 12. Ecological information

#### **Ecotoxicity**

The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
2,6-Di-tert-butyl-p-cresol	EC50 = 0.758  mg/L  96h	LC50 = 0.199 mg/L 96h	EC50 = 7.82 mg/L 5 min	EC50 >0.31 mg/L 48h
	EC50 = 6  mg/L  72  h		EC50 = 8.57 mg/L 15 min	-
	-		EC50 = 8.98 mg/L 30 min	

Persistence and Degradability Bioaccumulation/ Accumulation

Insoluble in water May persist No information available.

**Mobility** . Is not likely mobile in the environment due its low water solubility.

Component	log Pow		
2,6-Di-tert-butyl-p-cresol	4.17		

## 13. Disposal considerations

**Waste Disposal Methods** 

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

## 14. Transport information

DOT

UN-No UN3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.

Hazard Class 9
Packing Group III

**TDG** 

UN-No UN3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCES, SOLID, N.O.S.

Hazard Class 9
Packing Group

<u>IATA</u>

**UN-No** 3077

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.\*

Hazard Class 9
Packing Group III

### IMDG/IMO

UN-No 307

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.

Hazard Class 9
Packing Group III

# 15. Regulatory information

#### **International Inventories**

Component	TSCA	DSL	NDSL	<b>EINECS</b>	ELINCS	NLP	PICCS	<b>ENCS</b>	AICS	IECSC	KECL
2,6-Di-tert-butyl-p-cresol	Х	Χ	-	204-881-4	-		Χ	Χ	Χ	Х	Χ

#### Legend:

X - Listed

- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.
- XU Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).
- Y1 Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.
- Y2 Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

### U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

### SARA 311/312 Hazardous Categorization

Acute Health HazardYesChronic Health HazardYesFire HazardNoSudden Release of Pressure HazardNoReactive HazardNo

Clean Water Act Not applicable

Clean Air Act Not applicable

**OSHA** Occupational Safety and Health Administration

Not applicable

#### **CERCLA**

Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals

#### State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
2,6-Di-tert-butyl-p-cresol	X	X	X	-	X

## **U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

#### **U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

## Other International Regulations

Mexico - Grade Slight risk, Grade 1

#### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR

WHMIS Hazard Class D2B Toxic materials



# 16. Other information

Prepared By Regulatory Affairs

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Email: customerservice@laballey.com

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Revision Summary This document has been updated to comply with the US OSHA HazCom 2012 Standard

replacing the current legislation under 29 CFR 1910.1200 to align with the Globally

Harmonized System of Classification and Labeling of Chemicals (GHS)

### **Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of SDS**