

Material Safety Data Sheet

Version 4.0

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1. PRODUCT AND COMPANY IDENTIFICATION

Product name : 2-*tert*-Butylphenol

Product Number : B99405

Brand : Aldrich

Company : Sigma-Aldrich
3050 Spruce Street
SAINT LOUIS MO 63103
USA

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2. HAZARDS IDENTIFICATION**Emergency Overview****OSHA Hazards**

Toxic by inhalation., Toxic by ingestion, Corrosive

GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

Precautionary statement(s)

P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P284 Wear respiratory protection.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/ physician.

HMIS Classification

Health hazard: 3

Flammability: 1

Physical hazards: 0

NFPA Rating

Health hazard: 4

Fire: 1

Reactivity Hazard: 0

Potential Health Effects**Inhalation**

Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Skin
Eyes
Ingestion

May be harmful if absorbed through skin. Causes skin burns.
Causes eye burns.
Toxic if swallowed. Causes burns.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms : 2-tert-butylphenol

Formula : C₁₀H₁₄O

Molecular Weight : 150.22 g/mol

CAS-No.	EC-No.	Index-No.	Concentration
2-Tert-butylphenol			
88-18-6	201-807-2	-	-

4. 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

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

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

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

Environmental precautions

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

Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) 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).

Hand protection

Handle with gloves.

Eye protection

Tightly fitting safety goggles. Faceshield (8-inch minimum).

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	clear, liquid
Colour	dark brown

Safety data

pH	no data available
Melting point	-7 °C (19 °F) - lit.
Boiling point	224 °C (435 °F) - lit.
Flash point	113 °C (235 °F) - closed cup
Ignition temperature	no data available
Lower explosion limit	no data available
Upper explosion limit	no data available
Vapour pressure	0.07 hPa (0.05 mmHg) at 20 °C (68 °F) 0.00020 hPa (0.00015 mmHg) at 25 °C (77 °F)
Density	0.978 g/cm ³ at 25 °C (77 °F)
Water solubility	insoluble
Partition coefficient: n-octanol/water	log Pow: 3.31

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Conditions to avoid

no data available

Materials to avoid

Bases, Acid chlorides, Acid anhydrides, Oxidizing agents, Brass, Copper alloys, CopperBases, Acid chlorides, Acid anhydrides, Oxidizing agents, Brass, CopperStrong oxidizing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - rat - 440 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity). Behavioral:Tremor. Respiratory disorder

LC50 Inhalation - rat - 4 h - 1,070 mg/m³

LD50 Dermal - rat - 705 mg/kg

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Lacrimation. Behavioral:Coma. Nutritional and Gross Metabolic:Changes in:Body temperature decrease.

Skin corrosion/irritation

no data available

Skin - rabbit -

Serious eye damage/eye irritation

Eyes: no data available

Eyes - rabbit -

Respiratory or skin sensitization

no data available

no data available

Germ cell mutagenicity

no data available

no data available

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

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: 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

no data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

no data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

no data available

Aspiration hazard

no data available

Potential health effects

Inhalation	Toxic if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.
Ingestion	Toxic if swallowed. Causes burns.
Skin	May be harmful if absorbed through skin. Causes skin burns.
Eyes	Causes eye burns.

Signs and Symptoms of Exposure

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

Additional Information

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Toxicity to fish	LC50 - <i>Leuciscus idus melanotus</i> - 3.7 mg/l - 48 h Remarks: no data available
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Toxicity to daphnia and other aquatic invertebrates.	EC50 - <i>Daphnia</i> - 1 - 10 mg/l - 48 h Method: OECD Test Guideline 202 Remarks: Toxic to aquatic organisms.
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Toxicity to algae	IC50 - other microorganisms - 1 - 10 mg/l - 72 h Method: OECD Test Guideline 201
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Toxicity to bacteria	- <i>Pseudomonas putida</i> - 87 mg/l - 18 h
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Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

no data available

13. DISPOSAL CONSIDERATIONS

Product

Observe all federal, state, and local environmental regulations. 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)

UN-Number: 2922	Class: 8 (6.1)	Packing group: II
Proper shipping name: Corrosive liquids, toxic, n.o.s. (2-Tert-butylphenol)		
Marine pollutant: No		
Poison Inhalation Hazard: No		

IMDG

UN-Number: 2922	Class: 8 (6.1)	Packing group: II	EMS-No: F-A, S-B
Proper shipping name: CORROSIVE LIQUID, TOXIC, N.O.S. (2-Tert-butylphenol)			
Marine pollutant: No			

IATA

UN-Number: 2922	Class: 8 (6.1)	Packing group: II
Proper shipping name: Corrosive liquid, toxic, n.o.s. (2-Tert-butylphenol)		

15. REGULATORY INFORMATION

OSHA Hazards

Toxic by inhalation., Toxic by ingestion, Corrosive

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components

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

SARA 313 Components

SARA 313: 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

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

2-Tert-butylphenol

CAS-No.
88-18-6

Revision Date

New Jersey Right To Know Components

2-Tert-butylphenol

CAS-No.
88-18-6

Revision Date

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.

16. OTHER INFORMATION**Further information**

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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 Co., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.
