

Butylated Hydroxy Toluene

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Butylated Hydroxy Toluene

Synonyms/Generic Names: BHT; Ionol; Ionol (antioxidant); 2,6-Di-tertbutyl-p-cresol, 2,6-Bis(1,1-dimethylethyl)-4-methylphenol, 2,6-Di-tert-butyl-1-hydroxy-4-methylbenzene, 2,6-Di-tertbutyl-p-methylphenol, 3,5-Di-tert-butyl-4-hydroxytoluene, 4-Methyl-2,6-di-tert-butylphenol, Butylated hydroxytoluene, Butylhydroxytoluene

SDS Number: 137.00

Product Use: For Educational Use Only

Manufacturer: Columbus Chemical Industries, Inc.
N4335 Temkin Rd.
Columbus, WI. 53925

For More Information Contact: Ward's Science
5100 West Henrietta Rd.
PO Box 92912-9012
Rochester, NY 14692
(800) 962-2660 (Monday-Friday 7:30-7:00 Eastern Time)

In Case of Emergency Call: CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

2. HAZARDS IDENTIFICATION

OSHA Hazards: Harmful by ingestion, Irritant

Target Organs: None

Signal Words: Warning

Pictograms:



GHS Classification:

| | |
|--------------------------|-------------|
| Acute toxicity, Oral | Category 4 |
| Skin irritation | Category 2 |
| Eye irritation | Category 2A |
| Acute aquatic toxicity | Category 2 |
| Chronic aquatic toxicity | Category 2 |

GHS Label Elements, including precautionary statements:

Hazard Statements:

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| H302 | Harmful if swallowed. |
| H315 | Causes skin irritation. |
| H319 | Causes serious eye irritation. |
| H411 | Toxic to aquatic life with long lasting effects. |

Precautionary Statements:

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| P273 | Avoid release to the environment. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

Potential Health Effects

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|-------------------|--|
| Eyes | Causes eye irritation. |
| Inhalation | May be harmful if inhaled. Causes respiratory tract irritation. |
| Skin | May be harmful if absorbed through skin. Causes skin irritation. |
| Ingestion | Harmful if swallowed. |

NFPA Ratings

| | |
|------------------------|---------------|
| Health | 2 |
| Flammability | 0 |
| Reactivity | 0 |
| Specific hazard | Not Available |

HMIS Ratings

| | |
|-------------------|---|
| Health | 2 |
| Fire | 0 |
| Reactivity | 0 |
| Personal | E |

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Component | Weight % | CAS # | EINECS# / ELINCS# | Formula | Molecular Weight |
|---------------------------|-----------------|--------------|--------------------------|-----------------------------------|-------------------------|
| Butylated Hydroxy Toluene | 100 | 128-37-0 | 204-881-4 | C ₁₅ H ₂₄ O | 220.35 g/mol |

4. FIRST-AID MEASURES

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| Eyes | In case of eye contact, rinse with plenty of water for at least 15 minutes and seek medical attention. |
| Inhalation | Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention. |
| Skin | Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention. |
| Ingestion | Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention. |

5. FIRE-FIGHTING MEASURES

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| Suitable (and unsuitable) extinguishing media | Product is not flammable. Use appropriate media for adjacent fire. Cool unopened containers with water. |
| Special protective equipment and precautions for firefighters | Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots. |
| Specific hazards arising from the chemical | Emits toxic fumes (carbon oxides) under fire conditions. See also Stability and Reactivity section. |

6. ACCIDENTAL RELEASE MEASURES

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| Personal precautions, protective equipment and emergency procedures | See section 8 for recommendations on the use of personal protective equipment. |
| Environmental precautions | Prevent spillage from entering drains. Any release to the environment may be subject to federal/national or local reporting requirements. |

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| Methods and materials for containment and cleaning up | Sweep up and place in suitable, closed containers for disposal. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations. |
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7. HANDLING AND STORAGE

Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use.

Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Keep away from incompatible materials (see section 10 for incompatibilities).

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure controls:

| Component | Exposure Limits | Basis | Entity |
|---------------------------|----------------------|-------|--------|
| Butylated Hydroxy Toluene | 2 mg/m ³ | TLV | ACGIH |
| | 10 mg/m ³ | REL | NIOSH |

TWA: Time Weighted Average over 8 hours of work.

TLV: Threshold Limit Value over 8 hours of work.

REL: Recommended Exposure Limit

PEL: Permissible Exposure Limit

STEL: Short Term Exposure Limit during x minutes.

IDLH: Immediately Dangerous to Life or Health

WEEL: Workplace Environmental Exposure Levels

CEIL: Ceiling

Personal Protection

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|-------------------|---|
| Eyes | Wear chemical safety glasses or goggles. |
| Inhalation | Provide local exhaust, preferably mechanical. If exposure levels are excessive, use an approved respirator. |
| Skin | Wear nitrile or rubber gloves, apron or lab coat. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. |
| Other | Not Available |

Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

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| Appearance (physical state, color, etc.) | Clear, colorless to pale yellow solid. |
| Odor | Phenolic. |
| Odor threshold | Not Available |
| pH | Not Available |
| Melting point/freezing point | 70°C (158°F) |
| Initial boiling point and boiling range | 265°C (509°F) |
| Flash point | 127°C (261°F) |
| Evaporation rate | Not Available |
| Flammability (solid, gas) | Not Available |

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| Upper/lower flammability or explosive limit | Not Available |
| Vapor pressure | 0.01 hPa (0.01 mmHg) at 20°C (68°F) |
| Vapor density | 7.6 (air=1) |
| Relative density | 0.833 (water = 1) |
| Solubility (ies) | Soluble in methanol, acetone, toluene, isopropanol, methyl ethyl ketone, ethanol, petroleum ether, benzene, cellosolve, linseed oil. |
| Partition coefficient: n-octanol/water | Not Available |
| Auto-ignition temperature | 470°C (878°F) |
| Decomposition temperature | Not Available |

10. STABILITY AND REACTIVITY

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|---|--|
| Chemical Stability | Stable |
| Possibility of Hazardous Reactions | Will not occur. |
| Conditions to Avoid | Excess heat. |
| Incompatible Materials | Acid chlorides, acid anhydrides, oxidizing agents, bases, brass, copper. |
| Hazardous Decomposition Products | Carbon oxides. |

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

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|--------------------|------------------------|
| Skin | Not Available |
| Eyes | Not Available |
| Respiratory | Not Available |
| Ingestion | LD50 – Rat – 890 mg/kg |

Carcinogenicity

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|--------------|--|
| IARC | 3-Group 3: Not classifiable as to its carcinogenicity to humans (butylated hydroxyl toluene). |
| ACGIH | A4: Not classifiable for human or animal (butylated hydroxyl toluene). |
| NTP | No components 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 components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |

Signs & Symptoms of Exposure

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|--------------------|---|
| Skin | Mild to moderate skin irritation. May cause allergic reaction (dermatitis). |
| Eyes | Moderate irritation, redness, watering of eyes. |
| Respiratory | Coughing, wheezing. |
| Ingestion | Dizziness, weakness, slurred speech, ataxia, headache, confusion. |

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| Chronic Toxicity | May cause damage to blood, liver, central nervous system. |
| Teratogenicity | May cause adverse reproductive effects and birth defects. |
| Mutagenicity | Mutagenic to bacteria and yeast. May affect genetic material. |
| Embryotoxicity | Not Available |
| Specific Target Organ Toxicity | Not Available |
| Reproductive Toxicity | Not Available |
| Respiratory/Skin Sensitization | Not Available |

12. ECOLOGICAL INFORMATION

Ecotoxicity

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| Aquatic Vertebrate | LC50 – <i>Oryzias latipes</i> – 5.3 mg/L – 48h |
| Aquatic Invertebrate | EC50 – <i>Daphnia pulex</i> – 1.44 mg/L – 48h |
| Terrestrial | Not Available |

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|--------------------------------------|---------------|
| Persistence and Degradability | Not Available |
| Bioaccumulative Potential | Not Available |
| Mobility in Soil | Not Available |
| PBT and vPvB Assessment | Not Available |
| Other Adverse Effects | Not Available |

13. DISPOSAL CONSIDERATIONS

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|---------------------------|---|
| Waste Residues | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste products or residues. |
| Product Containers | Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product containers. |

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

14. TRANSPORTATION INFORMATION

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| US DOT | Not Dangerous Goods |
| TDG | UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (BUTYLATED HYDROXYTOLUENE), 9, pg III |
| IMDG | UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., (BUTYLATED HYDROXYTOLUENE), 9, pg III |
| Marine Pollutant | Yes |
| IATA/ICAO | UN3077, Environmentally hazardous substance, solid, n.o.s., (butylated hydroxytoluene), 9, pg III |

15. REGULATORY INFORMATION

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|---------------------------|--|
| TSCA Inventory Status | All ingredients are listed on the TSCA inventory. |
| DSCL (EEC) | All ingredients are listed on the DSCL inventory. |
| California Proposition 65 | Not Listed |
| SARA 302 | Not Listed |
| SARA 304 | Not Listed |
| SARA 311 | Acute Health Hazard |
| SARA 312 | Acute Health Hazard |
| SARA 313 | Not Listed |
| WHMIS Canada | Class D-1B: Poisonous and infectious material- Immediate and serious effects- Toxic Class D-2B: Poisonous and infectious material- Other effects- Toxic |

16. OTHER INFORMATION

| Revision | Date |
|------------|------------|
| Revision 1 | 01/08/2013 |
| Revision 2 | 06/21/2013 |
| | |

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