BHT (Butylated Hydroxytoluene)

Safety Data Sheet according to Federal Register / Vol. 77, No. 58 / March 26, 2012 / Rules and Regulation

Revision Date: 26-Aug-2020
Supersedes: 09-Jun-2016

1 PRODUCT & COMPANY IDENTIFICATION

Product Name: BHT
Synonyms: Butylated Hydroxytoluene; 2,6-di-tert-butyl-4-methyl phenol; 2,6-di-tert-butyl-p-cresol
INCI Name: Butylated hydroxytoluene
CAS Number: 128-37-0
Formula: No data available
Product Form: Powder or granules
Product Use: Cosmetic use

Distributor: MakingCosmetics.com Inc.
Address: 10800 231st Way NE
Redmond, WA 98053 (USA)

Phone / Fax: 425-292-9502 / 425-292-9601
Web: **www.makingcosmetics.com**

Emergency Telephone Number: 1-800-424-9300 (Chemtrec)

2 HAZARDS IDENTIFICATION

GHS Classification:
Serious eye damage/eye irritation – Category 2B
Specific target organ systemic toxicity (Single exposure) – Category 3
Acute aquatic toxicity – Category 1
Chronic aquatic toxicity – Category 1

GHS Signal Word: WARNING

GHS Hazard Pictograms:

GHS Hazard Statements:
H320: Causes eye irritation.
H335 + P336: May cause respiratory irritation. May cause drowsiness or dizziness.
H410: Very toxic to aquatic life with long lasting effects.
May form combustible dust concentrations in air (during processing)

GHS Precautionary Statements:
P280: Wear eye protection/face protection.
P264: Wash face, hands, and any exposed skin thoroughly after handling.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313: If eye irritation persists, Get medical advice/attention.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P271: Use only outdoors or in a well-ventilated area.
P304 + P340: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P304 + P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.
P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
P273: Avoid release to the environment.
P391: Collect spillage.
P501: Dispose of contents/container to an approved waste disposal plant.
Combustible dust clouds may be created where operations produce fine material (dust). Avoid significant deposits of material, especially no horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with 'best practices' (e.g. NFPA-654).

Potential Health Hazards:
Eyes: Irritating to eyes.
Inhalation: Inhalation of dust in high concentration may cause irritation of respiratory system.
Skin: May cause skin irritation.
Ingestion: May be irritating if swallowed.

NFPA Ratings (704):

Health	1	Slight
Flammability	1	Slight
Reactivity	0	Minimal

Specific Hazard N/A

3 COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	Weight %	Molecular Weight
Butylated hydroxytoluene	128-37-0	>99%	220.34

4 FIRST AID MEASURES

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Ig eye irritation persists, consult a specialist.

Inhalation: IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. If symptoms persist, call a physician.

Skin: Wash off skin with soap and water. Get medical attention if irritation develops or persists. Wash contaminated clothing before reuse.

Ingestion: Not an expected route of exposure. If swallowed: Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. If conscious, give 2 glasses of water. Get immediate medical attention.

5 FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Combustible material: may burn but does not ignite easily. Use appropriate media (foam, carbon dioxide, dry chemical) for adjacent fire. Do not use water.

Special protective equipment & precautions for firefighters: Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.

Flash Points: 118°C / 244°F (closed cup)

Specific hazards arising from the chemical: As the product contains combustible organic ingredients, fire will produce dense black smoke containing hazardous products of combustion (see Section 10). In case of incomplete combustion an increased formulation of oxides of nitrogen (NOx) is to be expected.

Explosive Properties: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard. Risks of ignition followed by flame propagation or secondary explosions shall be prevented by avoiding accumulation of dust, e.g. on floors and ledges. See Section 9 for more information.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment & emergency procedures: Evacuate personnel to safe areas. Do not try to clean up the leak without proper protective equipment. See section 8 for recommendations on the use of personal protective equipment. Prevent further leakage or spillage if safe to do so. Dust Deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are release into the atmosphere in sufficient concentration. Avoid dispersal of dust in the air (I.e., clearing dust surfaces with compressed air). Non-sparking tools should be used.

Environmental precautions: Prevent further leakage or pillage if safe to do so. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. Keep out of waterways. If the product contaminates rives and lakes or drains, inform respective authorities.

Methods and material for containment and cleaning up: Use personal protective equipment. Take precautionary measures against static discharges. Avoid dust formation. Take up mechanically and collect in suitable container for disposal. Non-sparking tools should be used. Clean contaminated surface thoroughly.

7 HANDLING & STORAGE

Precautions for safe handling: Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Avoid contact with skin and eyes. Do not breathe vapors/dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe Keep container tightly closed and in a cool, well ventilated place. Keep away from heat and incompatible

storage, incl. any incompatibilities: materials (see section 10 for incompatibilities).

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Component	Exposure Limits	Basis	Entity
Butylated hydroxytoluene	2 mg/m^3	TWA (inhalable fraction & vapor)	ACGIH TLV
	10 mg/m^3	TWA	NIOSH REL
	10 mg/m^3	(vacated) TWA	OSHA PEL
	2 mg/m^3	TWA	Ontario TWA
	2 mg/m^3	TWA	Korea
	10 mg/m^3		Australia
	10 mg/m^3	Mexico: TWA	Mexico
	20 mg/m^3	Mexico: STEL	Mexico
	2 mg/m^3	TWA	Argentina
	2 ppm	TWA	Venzuela

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:

Eyes: Safety glasses with side shields. Molten form: Goggles; Face shield.

Inhalation: It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust in the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks. Ensure adequate ventilation, especially in confined areas. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres.
No respiratory protection needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

Body: Long sleeved clothing should be worn. Impervious gloves should be worn.

Other: Use good personal hygiene practices. Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance @ 20°C:	White crystalline powder or granules	**Vapor Pressure:**	<0.01 mmHg @ 20°C
Odor:	Mild	**Vapor Density:**	7.6
Odor Threshold:	No data available	**Evaporation Rate:**	No data available
Color:	clear	**Flammability:**	No data available
Molecular Weight:	220.34	**Upper/lower Explosive Limit:**	Not applicable
pH:	7.2 (5% solution)	**Solubility in Water:**	Practically insoluble (0.4-1.14 mg/L)
Boiling Point:	265°C / 509°F	**Flash Point (closed cup):**	118°C / 244°F
Melting Point/Range:	69-70°C (156-158°F)	**Specific Gravity:**	No data available
Relative Density:	37.5 lbs/cu ft	**Auto-Ignition Temperature:**	470°C / 878°F
Partition Coefficient: n-octanol/water:	5.1	**Decomposition Temperature:**	No data available
Viscosity (dynamic):	3.45 cSt @ 80°C 1.54 cSt @ 120°C	**Explosive Properties:**	No data available
Oxidizing Properties:	No data available	**Freezing Point:**	No data available
Flammable Properties:	Combustible material: may burn but does not ignite readily		

Dust Explosion Properties: Maximum explosion overpressure: 7-9 Pm (bar)
Maximum Rate of Pressure Rise: 800-1300 [dP/dt (bar/s)]
Dust deflagration index (Kst): 200-350 [bar.m/s]
Minimum ignition energy (MIE): 10-25 (mJ)
Lower explosion limit: 10-20 [M.E.C. (g/m^3)]

10 STABILITY AND REACTIVITY

Reactivity: No data available
Chemical Stability: Stable under normal conditions.
Hazardous Polymerization: Does not occur.
Conditions to Avoid: Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.
Incompatible Materials: Strong acids, strong bases, oxidizing agents, reducing agents.
Hazardous Decomposition Products: Possible formation of carbon oxides, nitrogen oxides, and hazardous organic compounds.

11 TOXICOLOGICAL INFORMATION

Acute Toxicity: No data available
Skin: LD50: >2000 mg/kg
Eyes: No data available
Respiratory: No data available
Ingestion: LD50: >6000 mg/kg
Carcinogenicity: Contains no ingredient listed as a carcinogen.
Teratogenicity: No data available
Germ Cell Mutagenicity: None known
Embryotoxicity: No data available
Specific Target Organ Toxicity: Eyes, Lungs, Liver, Kidney, Thyroid
Reproductive Toxicity: None expected
Respiratory/Skin Sensitization: None known
Corrosivity: No data available
Sensitization: No data available
Irritation: Irritating to eyes. Inhalation of dust in high concentration may cause irritation of respiratory system.
Repeated Dose Toxicity: Repeated oral exposure at doses greater than 25 mg/kg/day resulted in growth depression and functional and histological changes to the lung, liver, kidneys, and thyroid.
Other Adverse Effects: May cause nausea, vomiting, gastro-intestinal distress, and narcotic effects if ingested in large doses well above the acceptable daily intake (ADI) of 0.3 mg/kg bw/day.

12 ECOLOGICAL INFORMATION

Ecotoxicity
Aquatic Vertebrate: LC50: 5 mg/L (48h) (*Oryzias latipes*)
Aquatic Invertebrate: EC50: 0.48 mg/L (48h) (*Daphnia magna*) (immonilization)
Terrestrial: EC50: 6 mg/L (72h) (*Pseudokirchneriella subcapitata*)
EC50: >0.42 mg/L (72h) (*Desmodesmus subsicatus*)
Persistence and Degradability: Not readily biodegradable.
Bioaccumulative Potential: The product may be accumulated in organisms.
Bioconcentration Factor (BCF): BCF: 230-2500 [(fish) 56 days]. Log P_{ow}: 5.1
Mobility in Soil: No data available
PBT and vPvB Assessment: No data available
Other Adverse Effects: May cause long term adverse effects in the aquatic environment.

13 DISPOSAL CONSIDERATIONS

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 product container.
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 container.

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

14 TRANSPORT INFORMATION

DOT (Dept. of Transportation, USA):	Not regulated
TDG (Transportation of Dangerous Goods, Canada):	No data available
IMDG (International Maritime Dangerous Goods):	Proper shipping name: Environmentally Hazardous Substance, Solid, n.o.s. (Butylated Hydroxytoluene) Hazard class: 9 UN/ID No.: 3077 Packing group: III Marine pollutant: Product is a marine pollutant according to the criteria set by IMDG/IMO
IATA (International Air Transport Association):	UN/ID No.: 3077 Proper shipping name: Environmentally Hazardous Substance, Solid, n.o.s. (Butylated Hydroxytoluene) Hazard class: 9 Packing group: III
ICAO (International Civil Aviation Organization):	UN/ID No.: 3077 Proper shipping name: Environmentally Hazardous Substance, Solid, n.o.s. (Butylated Hydroxytoluene) Hazard class: 9 Packing group: III
ADR/RID:	Proper shipping name: Environmentally Hazardous Substance, Solid, n.o.s. (Butylated Hydroxytoluene) Hazard class: 9 UN/ID No.: 3077 Packing group: III

15 REGULATORY INFORMATION

TSCA Inventory Status:	Complies
DSCL (EEC):	Complies
WHMIS (Canada):	No data available
EU EINECS/ELINCS/NLP:	Complies
China IECSC:	Complies
China IECIC (06.30.2014):	Complies
Australia AICS:	Complies
Korea KECL:	Complies
Philippines PICCS:	Complies
SARA 313:	Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.
SARA 311/312 Hazard Categories:	Acute Health Hazard: Yes Chronic Health Hazard: No Fire Hazard: No Sudden Release of Pressure Hazard: No Reactive Hazard: No
Clean Water Act:	This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)
CERCLA:	This material, as supplies, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

16 OTHER INFORMATION

Revision Date: 26-Aug-2020

Compliance: This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

Disclaimer: This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other process. Such information is to be the best of the company's knowledge and believed accurate and reliable as of the date indicated. However, no representation, warranty or guarantee of any kind, express or implied, is made as to its accuracy, reliability or completeness and we assume no responsibility for any loss, damage or expense, direct or consequential, arising out of use. It is the user's responsibility to satisfy himself as to the suitableness & completeness of such information for his own particular use.