


BHT

1. IDENTIFICATION

Product Name: BHT
INCI Name: Butylated hydroxytoluene
CAS#: 128-37-0
Product Form: Liquid
Product Use: Cosmetic use
Distributor: Avena Lab, Farmadria d.o.o.
Address: Heroja Pinkija 44, Vršac
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2. HAZARD(S) IDENTIFICATION

GHS Classification: Aquatic Acute 1, Aquatic Chronic 1, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, STOT SE 3
GHS Signal Word: WARNING
GHS Hazard Pictograms: 
GHS Hazard Statements:
H302: Harmful if swallowed
H315: Causes skin irritation
H319: Causes serious eye irritation
H332: Harmful if inhaled
H400: Very toxic to aquatic life
H410: Very toxic to aquatic life with long lasting effects
GHS Precautionary Statements:
P281: Use personal protective equipment as required
P273: Avoid release to the environment
Potential Health Hazards:
Eyes: Irritant
Inhalation: May be irritant
Skin: May be irritant
Ingestion: May be irritant
NFPA Ratings (704):
Health 1 Slight
Flammability 1 Slight
Reactivity 0 Minimal
Specific Hazard n/a

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS number	Weight %	Molecular Weight
Butylated Hydroxytoluene	128-37-0	>99%	220.34 g/mol

4. FIRST-AID MEASURES

Eyes:	Immediate medical attention is required. Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Inhalation:	Remove from exposure, lie down. Move to fresh air. If not breathing, give artificial respiration. Immediate medical attention is required.
Skin:	Wash off immediately with soap and plenty of water while removing all contaminated clothing and shoes. Obtain medical attention. Take off contaminated clothing and shoes immediately.
Ingestion:	Drink plenty of water. If possible, drink milk afterwards. Do Not Induce Vomiting! Never give anything by mouth to an unconscious person. Call a physician immediately.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Water spray, fog, CO ₂ , dry chemical, or alcohol resistant foam.
Unsuitable extinguishing media:	Do not use a solid water stream as it may scatter and spread fire.
Specific hazards arising from the chemical:	Fire may produce irritating, corrosive and/or toxic gases.
Special protective equipment and precautions for firefighters:	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Structural firefighters protective clothing will only provide limited protection. Wear self-contained breathing apparatus with a full facepiece operated in the positive pressure demand mode when fighting fires.
Fire fighting instructions:	In case of fire and/or explosion do not breathe fumes. Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Water runoff can cause environmental damage. Ventilate closed spaces before entering them. Keep run-off water out of sewers and water sources. Dike for water control.
Specific methods:	Use water spray to cool unopened containers.
General fire hazards:	Static charges generated by emptying package in or near flammable vapor may cause flash fire.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
(Methods and materials for containment and cleaning up)

Eliminate all sources of ignition. Avoid contact with skin or inhalation of spillage, dust or vapor. Keep unnecessary personnel away. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Collect and dispose of spillage as indicated in section 13 of the SDS. Absorb with inert absorbent such as dry clay, sand or diatomaceous earth, commercial sorbents, or recover using pumps. The product is immiscible with water and will spread on the water surface. Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Never return spills in original containers for re-use. This material and its container must be disposed of as hazardous waste. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). Prevent product from entering drains. Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Environmental precautions:

Retain and dispose of contaminated wash water. Avoid release to the environment. Contact local authorities in case of spillage to drain/aquatic environment. Prevent further leakage or spillage if safe to do so.

7. HANDLING AND STORAGE

Precautions for safe handling:

Do not handle or store near an open flame, heat or other sources of ignition. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Avoid breathing vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities:

Keep container closed. Handle containers with care. Open slowly in order to control possible pressure release. Store in a cool, well-ventilated area.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits:

This substance has no PEL, TLV, or other recommended exposure limit.

Biological limit values:

No biological exposure limits noted for the ingredient(s).

Appropriate engineering controls:

Use explosion-proof ventilation equipment to stay below exposure limits. Adequate ventilation should be provided so that exposure limits are not exceeded.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin protection

Hand protection: Chemical resistant gloves.

Other: Wear suitable protective clothing.

Respiratory protection: Respiratory protection not required. If ventilation is insufficient, suitable respiratory protection must be provided.

Thermal hazards: Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance, Physical State:	Solid crystalline; pellets
Odor:	Mild
Color:	White
Molecular Weight:	220.34 g/mol
pH (1% sol. in water)	N/A
Boiling Point:	>265°C (509°F)
Melting Point:	69-70°C (156-158°F)
Flash Point:	>118°C (244°F)
Vapor Pressure:	<0.01 mmHg (@ 20°C)
Vapor Density:	7.6
Lower Explosive Limit:	10-20 [M.E.C. (g/m³)]
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/m³)]
Solubility:	Practically insoluble in water: 0.4 -1.14 mg/l
Flammability:	Combustible material: may burn. Does not ignite readily

10. STABILITY AND REACTIVITY

Reactivity:	Product is stable
Chemical Stability:	Product is stable
Hazardous Polymerization:	Will not occur
Conditions to Avoid:	Heat (temperatures above flash point), sparks, ignition points, flames, static electricity.
Incompatible Materials:	Strong acids & bases, oxidizing agents & reducing agents
Hazardous Decomposition Products:	Will not occur

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	LD50 oral (rat): >6000 mg/kg
Skin:	LD50 dermal (rat): >2000 mg/kg
Eyes:	Irritating to eyes
Inhalation:	Inhalation of dust in high concentration may cause irritation of respiratory system
Ingestion:	This material is not likely to cause irritation upon ingestion. It is classified as "relatively harmless"
Carcinogenicity:	Contains no ingredient listed as a carcinogen
Germ Cell Mutagenicity:	Not available
Embryotoxicity:	Not available
Specific Target Organ Toxicity:	Eyes, Lungs, Liver, Kidney, Thyroid.
Reproductive Toxicity:	None expected in humans. The only effects on reproduction in rats and mice were lower numbers of litters of ten or more pups at birth at doses of 100 mg/kg/day and above. During pregnancy, BHT had maternal effects on mice above oral doses of 240 mg/kg/day.

12. ECOLOGICAL INFORMATION

Ecotoxicity:	Very toxic to aquatic life with long lasting effects.
Toxicity to Algae:	EC50 72h: = 6mg/L (Pseudokirchneriella subcapitata)
	EC50 72h: >0.42mg/L (Desmodesmus subspicatus)
Toxicity to Fish:	LC50 48h: = 5mg/L (Oryzias latipes)
Toxicity to daphnia and other aquatic invertebrates:	EC50 48h: = 0.48mg/L (Daphnia magna immobilization)
Persistence and Degradability:	Not readily biodegradable
Bioaccumulative Potential:	This product may be accumulated in organisms
Bioconcentration Factor (BCF):	230-2500 [(fish) 56 days] log Pow: 5.1
Mobility in Soil:	No data available
PBT and vPvB Assessment:	No data available
Other Adverse Effects:	Not data available

13. DISPOSAL CONSIDERATIONS

Disposal instructions:	Do not discharge into drains, water courses or onto the ground. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations:	Dispose in accordance with all applicable regulations.
Hazardous waste code:	Not established.
Waste from residues / unused products:	Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

Transport	Transport	Hazard class	Packing group	UN number
Land	RID/ADR	Not Regulated	Not Regulated	Not Regulated
Maritime	IMDG			
Air	IATA/DGR			

15. REGULATORY INFORMATION

No data available

16. OTHER INFORMATION

Disclaimer: Avena Lab, Farmadria d.o.o. cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The above information relates only to this product and not to its use in combination with any other material or any particular process and is designed only as guidance for the safe handling, use, processing, storage, transportation, and disposal and should not be considered as a guarantee or quality specification. It is the sole responsibility of the individual(s) purchasing this product to assess its' safety in the final application. The above information is based on data provided by and collected from recognized sources such as distributors, manufacturers, and technical groups and is considered to be accurate to the best of our knowledge. Appropriate warnings and safe handling procedures should be provided to all handlers and users, taking into account the intended use and the specific conditions and factors relating to such use in accordance with all applicable laws and regulations.

