Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification:
   - **Product Description**: Butylated Hydroxytoluene
   - **Synonyms**: 2,6-di-tert-butyl-4-hydroxytoluene; Butylated Hydroxy Toluene
   - **CAS-No**: 128-37-0
   - **EC-No.**: 204-881-4
   - **Molecular Formula**: C_{15}H_{24}O
   - **REACH Registration No**: Not Applicable

1.2. Relevant identified uses of the substance or mixture and uses advised against:
   - **Recommended Use**: For research use only, not for human or veterinary use

1.3. Details of the supplier of the safety data sheet:
   - **Company**: Finar Limited
     184-186/P, Chacharwadi Vasna,
     Sarkhej-Bavla Highway,
     Ta.: Sanand, Dist.: Ahmedabad,
     Email: info@finarchemicals.com
     Web: [www.finarchemicals.com](http://www.finarchemicals.com)
   - **E-mail Address**
     safety@finarchemicals.com;
     info@finarchemicals.com

1.4. Emergency telephone number:
   - For Emergency contact on: +91 - 2717 - 616 717
   - Registered office No: +91 - 79 – 40040085
SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:
CLP Classification - Regulation (EC) No 204-881-4

2.2 Label Elements:
Labeling according to Regulation (EC) No 1272/2008 (CLP)
Signal Word: Warning
Pictogram

- Hazard Statements:
  H 400
  Very toxic to aquatic life.
  H 410
  Very toxic to aquatic life with long lasting effects.

- Precautionary Statements- Prevention
  P 273
  Avoid release to environment

2.3 Other Hazards: Not known

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances: Butylated Hydroxytoluene

3.2 Mixtures:

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS-No</th>
<th>EC-No.</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butylated Hydroxytoluene</td>
<td>128-37-0</td>
<td>204-881-4</td>
<td>100%</td>
</tr>
</tbody>
</table>
SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

- **General Advice**: Take off contaminated clothing.

- **Eye Contact**: Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. In case of eye irritation consult an ophthalmologist.

- **Skin Contact**: Immediately wash skin with soap and plenty of water for at least 20 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

- **Ingestion**: Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

- **Inhalation**: Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed:

Irritation

4.3 Indication of any immediate medical attention and special treatment needed:

No further relevant information available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

**Suitable Extinguishing Media** -
Co-ordinate fire-fighting measures to the fire surroundings water spray, foam, dry extinguishing powder, carbon dioxide (CO2)

**Unsuitable Extinguishing Media** -
Water Jet

5.2 Special hazards arising from the substance or mixture:

Combustible, Vapours are heavier than air, spread along floors and form explosive mixtures with air.
Hazardous combustion products
In case of fire may be liberated: carbon monoxide (CO), carbon dioxide (CO2)

5.3 Advice for firefighters:
Fight fire with normal precautions from a reasonable distance. Wear self-contained breathing apparatus.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:
Wearing of suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. Do not breathe dust. Avoid contact with skin, eyes and clothes.

6.2 Environmental precautions:
Keep away from drains, surface and ground water.

6.3 Methods and material for containment and cleaning up:
Advices on how to contain a spill - Covering of drains
Advices on how to clean up a spill - Take up mechanically. Control of dust
Other information relating to spills and releases - Place in appropriate containers for disposal

6.4 Reference to other sections:

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling
Provision of sufficient ventilation
Measures to prevent fire as well as aerosol and dust generation - Removal of dust deposits
Advice on general occupational hygiene - Wash hands before breaks and after work. Keep away from food, drink and animal feeding stuffs.

7.2 Conditions for safe storage, including any incompatibilities:
Store in Dry Space
Incompatible substances or mixtures - Observe hints for combined storage.

Consideration of other advice

Ventilation requirements - Use local and general ventilation.

Specific designs for storage rooms or vessels - Recommended storage temperature: 15 - 25 °C.

7.3 Specific end use(s): No further relevant information available.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control Parameters:

<table>
<thead>
<tr>
<th>CAS #</th>
<th>Chemical Name</th>
<th>Jurisdiction</th>
<th>Recommended Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>128-37-0</td>
<td>Butylated Hydroxytoluene</td>
<td>ACGIH TLV</td>
<td>TLV: 2 mg/m³ (Inhalation)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>France VL</td>
<td>TWA: 10 mg/m³</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Britain EH40</td>
<td>TWA: 10 mg/m³</td>
</tr>
</tbody>
</table>

8.2. Exposure controls:

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

Personal Protective Equipment:

- **Eye Protection** - Safety Glasses
- **Hand Protection** - Compatible chemical-resistant gloves
- **Skin and body protection** - Long sleeved clothing, Lab Coat
- **Respiratory Protection** - NIOSH approved respirator, as conditions warrant
- **Work/Hygienic/Maintenance Practices** - Do not take internally.

Facilities storing or utilizing this material should be equipped with an eye wash and a safety shower. Wash thoroughly after handling.

- Environmental Exposure Controls –
Keep away from drains, surface and ground water.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties:

Physical state and appearance: Solid (Crystals solid or Powdered solid)
Odour: Odourless
Molecular Weight: 220.40 g/mole
Color: Colourless
pH (1% soln/water): Not Available
Boiling Point: Decomposition Temperature: 265 °C
Melting Point: Decomposition Temperature: 67-71 °C
Flash Point: 127 °C (Close up)
Specific Gravity: Not Available
Vapor Pressure: 0.011 hPa at 20 °C
Density: 1.03 g/cm³ at 20 °C
Vapor Density: 7.61 (air = 1)
Bulk Density: 450 kg/m³
Volatility: Not available
Odour Threshold: Not Available
Water/Oil Dist. Coeff.: Not Available
Ionicity (in Water): Not available
Dispersion Properties: See solubility in water.
Water Solubility: 0.76 mg/l at 20 °C
n-octanol/water (log KOW): 5.1 (ECHA)
Soil organic carbon/water (log KOC): 4.363 (ECHA)
Auto-ignition Temperature: 345 °C

9.2 Other Information:

Molecular Formula: C_{15}H_{24}O
Molecular Weight: 220.40 g/mol
SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity: The product in the delivered form is not dust explosion capable; the enrichment of fine dust however leads to the danger of dust explosion.

10.2 Chemical Stability: The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions: Violent Reaction with: Alkalis, Bases, Oxidisers, Peroxides, Acid chlorides, inorganic, Sulphuric acid and Strong acid

10.4 Conditions to avoid: Direct light irradiation

10.5 Incompatible Materials: Acid anhydrides, Acid chlorides, Bases, Brass, Copper/copper compounds, Oxidizing agents

10.6 Hazardous Decomposition Products: Carbon Dioxide & Carbon Monoxide

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

Toxicology data for the components:

<table>
<thead>
<tr>
<th>LD50 Oral</th>
<th>LD50 Dermal</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;2930 mg/kg</td>
<td>&gt;2000 mg/kg</td>
</tr>
</tbody>
</table>

Skin corrosion/irritation
Shall not be classified as corrosive/irritant to skin

Serious eye damage/eye irritation
Causes serious eye irritation

Respiratory or skin sensitization
Shall not be classified as a respiratory or skin sensitizer

**Reproductive Toxicity:**
Suspected of damaging fertility or the unborn child

**Specific target organ toxicity - single exposure**
Causes damage to organs

**Specific target organ toxicity - repeated exposure**
May cause damage to organs through prolonged or repeated exposure

**Aspiration hazard**
Shall not be classified as presenting an aspiration hazard

### SECTION 12: ECOLOGICAL INFORMATION

12.1 **Toxicity:**
Avoid release into the environment - toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Runoff from fire control or dilution water may cause pollution.

12.2 **Persistence and degradability Persistence:**
- Theoretical Oxygen Demand: 2.977 mg/mg
- Theoretical Carbon Dioxide: 2.996 mg/mg

12.3 **Bio accumulative potential:** The substance fulfils the very bioaccumulative criterion
- n-octanol/water (log KOW): 5.1
- BCF: 598.4

12.4 **Mobility in soil:**
- Henry's law constant: 0.418 Pa m³/mol at 25 °C
- The Organic Carbon normalized adsorption coefficient: 4.363

12.5 **Results of PBT and vPvB assessment:** No data available

12.6 **Other adverse effects:** No data available

### SECTION 13: DISPOSAL CONSIDERATIONS

13.1 **Waste Treatment Methods:**
This material and its container must be disposed of as hazardous waste. Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Sewage disposal-relevant information**: Do not empty into drains.

- **Waste treatment of containers/packaging**: It is a dangerous waste; only packaging which are approved (e.g. acc. to ADR) may be used.

13.2 **Relevant provisions relating to waste**
The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

13.3 **Remarks**
Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities. Please consider the relevant national or regional provisions.

**SECTION 14: TRANSPORT INFORMATION**

<table>
<thead>
<tr>
<th></th>
<th>Land transport (ADR/RID)</th>
<th>Air transport (IATA)</th>
<th>Sea transport (IMDG)</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1 UN number</td>
<td>UN 3077</td>
<td>UN 3077</td>
<td>UN 3077</td>
</tr>
<tr>
<td>14.2 Proper shipping name</td>
<td>ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,6-di-tert-Butyl-p-cresol)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.3 Class</td>
<td>9</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>14.4 Packing group</td>
<td>III</td>
<td>III</td>
<td>III</td>
</tr>
<tr>
<td>14.5 Environmentally hazardous</td>
<td>yes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.6 Special precautions for user</td>
<td>Not available.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</td>
<td>Not Relevant</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SECTION 15: REGULATORY INFORMATION

- **Federal and State Regulations:** TSCA inventory: listed
- **Other Regulations:**

**Personal protective equipment:**
- **Eye Protection:** Safety glasses with side-shields Goggles
- **Hand Protection:** Protective gloves
- **Skin and body protection:** Long sleeved clothing
- **HMIS (U.S.A.):**
  - Health Hazard: 2
  - Fire Hazard: 1
  - Reactivity: 0
- **National Fire Protection Association (U.S.A.):**
  - Health: 1
  - Flammability: 1
  - Reactivity: 0

SECTION 16: OTHER INFORMATION

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Legend:**

CAS - Chemical Abstracts Service, TSCA - United States Toxic Substances Control Act Section 8(b) Inventory, EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances, RPE - Respiratory Protective Equipment, LD50 - Lethal Dose 50%, LC50 - Lethal Concentration 50%, EC50 - Effective Concentration 50%, Water, PBT - Persistent, Bio accumulative, Toxic, vPvB - very Persistent, very Bio accumulative, ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road, ICAO/IATA - International Civil Aviation Organization/International Air Transport Association, OECD - Organization for Economic Co-operation and Development, ATE - Acute Toxicity Estimate,
Material Safety Data Sheet

| Product Name | Butylated Hydroxytoluene |

References: Not available

Created: 26/10/2020

- Disclaimer:

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