Not appropriate for regulatory submission. Please visit www.spectrumchemical.com or contact Tech Services for the most up-to-date information contained in this information package.
B1196, Butylated Hydroxytoluene, Granular, NF

Table of Contents

- Product Specification
- Certificate of Analysis Sample(s)
- Safety Data Sheet (SDS)
- Certification of Current Good Manufacturing Practices (cGMP)
- Source Statement
- BSE/TSE Statement
- Allergen Statement
- EU Fragrance Allergen Statement
- GMO Statement
- Melamine Statement
- Nitrosamine Statement
- Animal Testing Statement
- Organic Compliance Statement
- Shelf Life Statement
- Other Chemicals Statement
- Elemental Impurities Statement
- Residual Solvents Statement
- General Label Information – Sample Label
- General Lot Numbering System Guidance
- Kosher Certificate
- Halal Certificate
<table>
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<tr>
<th>Item Number</th>
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<td>CAS Number</td>
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</table>

Spectrum Chemical Mfg Corp

Corporate Headquarters: 769 Jersey Ave.  New Brunswick, NJ 08901  732.234.1300
West Coast Facility: 14422 S. San Pedro St.  Gardena, CA 90248  310.516.8000
# Certificate Of Analysis

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</table>
All pharmaceutical ingredients are tested using current edition of applicable pharmacopeia.

Read and understand label and SDS before handling any chemicals. All Spectrum’s chemicals are for manufacturing, processing, repacking or research purposes by experienced personnel only. It is the customer’s responsibility to provide adequate hazardous material training and ensure that appropriate Personal Protective Equipment (PPE) is used before handling any chemical.

The Elemental Impurities standards implemented by USP and other Pharmaceutical Compendia reflect a growing understanding of the toxicology of trace levels of elemental impurities that can remain in drug substances originating from either raw materials or manufacturing processes. Identifying and quantifying impurities can be critical to predicting the best possible patient outcomes. Elemental Impurities has been a requirement of all products meeting USP/NF, EP and BP monographs since January 1, 2018. More information can be found in USP sections <232> Elemental Impurities – Limits and <233> Elemental Impurities – Procedures. Data for drug substances furnished by Spectrum Chemical Mfg. Corp can be used to ensure that patient daily exposures by oral administration to the selected elements are not exceeded in the formulation of pharmaceutical products.
# SAFETY DATA SHEET

**Preparation Date:** 4/24/2014  
**Revision date:** 7/31/2019  
**Revision Number:** G6

## 1. IDENTIFICATION

**Product identifier**

**Product code:** B1196  
**Product Name:** BUTYLATED HYDROXYTOLUENE, GRANULAR, NF

**Other means of identification**

**Synonyms:**  
- BHT  
- Butylhydroxytoluene  
- p-Cresol, 2,6-di-tert-butyl-  
- Butylated Hydroxytoluene  
- Ionol  
- 2,6-Di-tert-butyl-p-cresol  
- 2,6-Bis(1,1-dimethylethyl)-4-methylphenol  
- 2,6-Di-tert-butyl-1-hydroxy-4-methylbenzene  
- 2,6-Di-tert-butyl-p-methylphenol  
- 3,5-Di-tert-butyl-4-hydroxytoluene  
- 4-Methyl-2,6-di-tert-butylphenol

**CAS #:** 128-37-0  
**RTECS #**  
**CI#:** Not available

**Recommended use of the chemical and restrictions on use**

**Recommended use:** FOOD ADDITIVE; ANTIOXIDANT FOR SYNTHETIC RUBBERS, PLASTICS, SOAPS, ANIMAL & VEGETABLE OILS; ANTISKINNING AGENT IN PAINTS & INKS; IN CHEWING GUM BASE, PACKAGING MATERIALS, BUTTER, CANDY, PARAFFIN & MINERAL OILS; EMPLOYED TO RETARD OXIDATIVE DEGRADATION OF OILS & FATS IN VARIOUS COSMETICS & PHARMACEUTICALS.

**Uses advised against:** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
14422 South San Pedro St.  
Gardena, CA 90248  
(310) 516-8000

**Order Online At:** [https://www.spectrumchemical.com](https://www.spectrumchemical.com)  
**Emergency telephone number**  
Chemtrec 1-800-424-9300  
**Contact Person:** Tom Tyner (USA - West Coast)  
**Contact Person:** Ibad Tirmiz (USA - East Coast)

## 2. HAZARDS IDENTIFICATION

**Classification**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)
Acute toxicity - Oral Category 4
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A

Label elements

Warning

Hazard statements
Harmful if swallowed
Causes skin irritation
Causes serious eye irritation

Hazard statements not otherwise classified (HNOC)
Not Applicable

Other hazards
Toxic to aquatic life with long lasting effects
Toxic to aquatic life

Precautionary Statements - Prevention
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
IF ON SKIN: Wash with plenty of water
If skin irritation occurs: Get medical attention
Take off contaminated clothing and wash it before reuse
IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell
Rinse mouth

Precautionary Statements - Disposal
Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Weight-%</th>
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<td>Butylated Hydroxytoluene</td>
<td>128-37-0</td>
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4. FIRST AID MEASURES

First aid measures

General Advice: National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call

Product code: B1196 Product name: BUTYLATED HYDROXYTOLUENE, GRANULAR, NF
Skin Contact: Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact: Flush eyes with water for 15 minutes. Get medical attention.

Inhalation: Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

Most important symptoms and effects, both acute and delayed

**Symptoms**
- Irritating to eyes and skin
- Vomiting
- Nausea
- May cause diarrhea
- Respiratory depression
- Central nervous system effects
- Tremors

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

5. FIRE-FIGHTING MEASURES

**Extinguishing Media**

**Suitable Extinguishing Media:**
- Dry chemical
- Carbon dioxide (CO2)
- Water spray mist or foam

**Unsuitable Extinguishing Media:**
- No information available

**Specific hazards arising from the chemical**

**Hazardous combustion products**
- Carbon Monoxide, Carbon Dioxide

**Specific hazards**
- May be combustible at high temperatures

**Special Protective Actions for Firefighters**

**Specific Methods:**
- No information available

**Special Protective Equipment for Firefighters:**
- As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear
6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Avoid dust formation. Remove all sources of ignition.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

Methods for cleaning up Sweep up and shovel into suitable containers for disposal. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions: Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice: Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not ingest. Do not breathe dust. Keep away from heat and sources of ignition. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions: Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

Incompatible Materials: Oxidizing agents

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

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<tr>
<th>Component</th>
<th>CAS No</th>
<th>OSHA</th>
<th>NIOSH</th>
<th>ACGIH</th>
<th>AIHA WEEL</th>
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<td>10 mg/m³ TWA</td>
<td>2 mg/m³ TWA inhalable fraction and vapor</td>
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Canada

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<th>Component</th>
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<td>10 mg/m³ TWA</td>
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<td>10 mg/m³ STEV</td>
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Product code: B1196  Product name: BUTYLATED HYDROXYTOLUENE, GRANULAR, NF
Australia and Mexico

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<td>128-37-0</td>
<td>10 mg/m³ TWA</td>
<td>10 mg/m³ TWA</td>
</tr>
</tbody>
</table>

### Appropriate engineering controls

**Engineering measures to reduce exposure:** Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Individual protection measures, such as personal protective equipment

#### Personal Protective Equipment

**Eye protection:** Goggles

**Skin and body protection:** Long sleeved clothing
Chemical resistant apron
Gloves

**Respiratory protection:** Effective dust mask. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds), inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Physical state:</th>
<th>Appearance:</th>
<th>Color:</th>
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</thead>
</table>

**Odor:** Slight. Phenolic.

**Taste:** Tasteless.

**Formula**

C15-H24-O

**Molecular/Formula weight (g/mole):** 220.36

**Flammability (solid, gas):**

No data available

**Flashpoint (°C/°F):**

127 °C/260 °F

**Autoignition Temperature (°C/°F):**

470 °C/878°F

**Lower Explosion Limit (%):**

No information available

**Upper Explosion Limit (%):**

No information available

**Melting point/range(°C/°F):**

70 °C/158 °F

**Decomposition temperature(°C/°F):**

No information available

**Boiling point/range(°C/°F):**

265 °C/509 °F

**Density (g/cm³):**

No information available

**Specific gravity:**

No information available

**Product code:** B1196

**Product name:** BUTYLATED HYDROXYTOLUENE, GRANULAR, NF
10. STABILITY AND REACTIVITY

Reactivity
Reactive with oxidizing agents

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Hazardous polymerization does not occur

Conditions to avoid:

Incompatible Materials:
Oxidizing agents

Hazardous decomposition products:
Carbon monoxide. Carbon dioxide.

Other Information
Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:
Ingestion. Inhalation.

Acute Toxicity

Component Information

Butylated Hydroxytoluene
CAS No 128-37-0

Product code: B1196
Product name: BUTYLATED HYDROXYTOLUENE, GRANULAR, NF
LD50/oral/rat = 890 mg/kg
LD50/oral/mouse = 650-1040 mg/kg
LD50/dermal/rabbit = No information available
LD50/dermal/rat = > 2000 mg/kg
LC50/inhalation/rat = No information available
LC50/inhalation/mouse = No information available
Other LD50 or LC50 information = 10700mg/kg oral LD50 Guinea pig
2100 mg/kg oral LD50 Rabbit

Product Information

LD50/oral/rat =
Value - Acute Toxicity = 890 mg/kg

LD50/oral/mouse =
Value - Acute Tox = 650-1040 mg/kg

LD50/dermal/rabbit
Value - Acute Toxicity = No information available

LD50/dermal/rat
VALUE - Acute Tox = >2000 mg/kg

LC50/inhalation/rat
VALUE-Vapor = No information available
VALUE-Gas = No information available
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse
VALUE-Vapor = No information available
VALUE - Gas = No information available
VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes skin irritation. Moderately irritating to the skin.

Eye Contact: Causes eye irritation. Moderately irritating to the eyes.

Inhalation May cause irritation of respiratory tract.

Ingestion Harmful if swallowed. May cause gastritis. Ingestion may cause nausea, vomiting. May cause hypermotility, diarrhea. May affect behavior/central nervous system (tremors, muscle twitching). May affect respiration (respiratory depression).

Aspiration hazard No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity

Prolonged or repeated ingestion may affect the liver. Prolonged or repeated ingestion may affect the kidneys. Prolonged or repeated ingestion may affect the thyroid and result in thyroid hyperfunction. Prolonged or repeated ingestion may affect the adrenal gland. Prolonged or repeated ingestion may affect the blood (changes in red blood cell count). Prolonged or repeated ingestion may affect the blood (changes in serum composition). Prolonged or repeated ingestion may cause weight loss. Prolonged or repeated ingestion may affect the blood (changes in...
in clotting factors). BHT is a rare skin sensitizer and may cause allergic contact dermatitis (contact urticaria) in very sensitive individuals.

**Sensitization:** No information available.

**Mutagenic Effects:** May affect genetic material
- Mutations in microorganisms
- Mutagenic effects in mammalian somatic cells
- Experiments with animal lymphocytes have shown mutagenic effects

**Carcinogenic effects:** Not considered carcinogenic.

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>IARC</th>
<th>ACGIH - Carcinogens</th>
<th>NTP</th>
<th>OSHA HCS - Carcinogens</th>
<th>Australia - Notifiable Carcinogenic Substances</th>
<th>Australia - Prohibited Carcinogenic Substances</th>
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ACGIH (American Conference of Governmental Industrial Hygienists)

IARC (International Agency for Research on Cancer)

NTP (National Toxicology Program)

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available

**Developmental Effects:** May cause adverse developmental effects based on animal data
- Butylated hydroxytoluene has adverse effects on development in experimental animals only at exposure levels well above typical human exposures

**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

STOT - single exposure No information available.

STOT - repeated exposure No information available.

**Target Organs:** Liver. Skin. Eyes.

12. ECOLOGICAL INFORMATION

**Ecotoxicity**

**Ecotoxicity effects:** Aquatic environment.

_Butylated Hydroxytoluene - 128-37-0_

- **Algae/aquatic plants** 6 mg/L EC50 Pseudokirchneriella subcapitata 72 h 0.42 mg/L EC50 Desmodesmus subspicatus 72 h
- **Fish** 5 mg/L LC50 Oryzias latipes 48 h 1

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.
13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:
Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:
Empty containers should be taken for local recycling, recovery or waste disposal

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Butylated Hydroxytoluene</td>
<td>128-37-0</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

14. TRANSPORT INFORMATION

DOT

UN-No: Not Regulated for Transportation unless all or part of the transportation is by vessel (applies to bulk and non-bulk shipments). For bulk shipments by ground only, it may be transported as a marine pollutant (regulated as UN3077 Class 9 "Environmentally Hazardous Substances, solid") because it meets the requirement of Chapter 2.9 of the IMDG code, but it is not mandatory by DOT because it is not on the DOT Marine Pollutant list in 49CFR Appendix B to 172.101.

Proper Shipping Name: No information available
Hazard Class: No information available
Subsidiary Class: No information available
Packing group: No information available
Emergency Response Guide Number: No information available
Marine Pollutant: No data available
DOT RQ (lbs): No information available
Special Provisions: No Information available
Symbol(s): No information available
Description: No information available

TDG (Canada)

UN-No: UN3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s.(butylated hydroxytoluene)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant: Marine Pollutant
Description: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S.,9,UN3077,PG III

ADR

UN Number: UN3077
( exception <5 liters for liquids and < 5 kilogram for solids - per single packagings or combination packagings per inner packaging)
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s.(butylated hydroxytoluene)
Transport hazard class(es): 9

Product code: B1196
Product name: BUTYLATED HYDROXYTOLUENE, GRANULAR, NF
Packing group: III
Subsidiary Risk: No information available
Description: UN3077 Environmentally hazardous substance, solid, n.o.s.,9,III

IMDG
UN-No: UN3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (butylated hydroxytoluene)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
Marine Pollutant: Marine Pollutant
EMS: F-A

RID
UN Number: UN3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (butylated hydroxytoluene)
Transport hazard class(es): 9
Subsidiary Risk: No information available
Packing group: III
Description: UN3077 Environmentally hazardous substance, solid, n.o.s.,9,III,RID

ICAO (air)
UN-No: UN3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (butylated hydroxytoluene)
Hazard Class: 9
Subsidiary Risk: No information available
Packing Group: III
Description: Environmentally hazardous substance, solid, n.o.s.,9,UN3077,PG III

IATA
UN Number: UN3077
Proper Shipping Name: Environmentally hazardous substance, solid, n.o.s. (butylated hydroxytoluene)
Transport hazard class(es): 9
Subsidiary Risk: No information available
Packing Group: III
Precautionary Statements - Response: 9L
Special Provisions: No information available
Description: UN3077, Environmentally hazardous substance, solid, n.o.s.,9,PG III

15. REGULATORY INFORMATION

International Inventories

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>U.S. TSCA</th>
<th>KOREA KECL</th>
<th>Philippines (PICCS)</th>
<th>Japan ENCS</th>
<th>China IECSC</th>
<th>Australia (AICS)</th>
<th>EINECS-No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butylated Hydroxytoluene</td>
<td>128-37-0</td>
<td>Present</td>
<td>Present KE-03079</td>
<td>Present</td>
<td>Present (9)-1805, (5)-6372,(3)-540</td>
<td>Present</td>
<td>Present</td>
<td>Present 204-881-4</td>
</tr>
</tbody>
</table>

U.S. Regulations

Butylated Hydroxytoluene
Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 0814
Pennsylvania RTK: Present
Minnesota - Hazardous Substance List: Present
California Directors List of Hazardous Substances: Present

Product code: B1196        Product name: BUTYLATED HYDROXYTOLUENE, GRANULAR, NF
FDA - Food Additives Generally Recognized as Safe (GRAS): 21 CFR 182.3173


Chemicals Known to the State of California to Cause Cancer:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:
This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Carcinogen</th>
<th>Developmental Toxicity</th>
<th>Male Reproductive Toxicity</th>
<th>Female Reproductive Toxicity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butylated Hydroxytoluene</td>
<td>128-37-0</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
<td>Not Listed</td>
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</tbody>
</table>

CERCLA/SARA

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>CERCLA - Hazardous Substances and their Reportable Quantities</th>
<th>Section 302 Extremely Hazardous Substances and TPQs</th>
<th>Section 302 Extremely Hazardous Substances and RQs</th>
<th>Section 313 - Chemical Category</th>
<th>Section 313 - Reporting de minimis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butylated Hydroxytoluene</td>
<td>128-37-0</td>
<td>None</td>
<td>None</td>
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<td>None</td>
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</table>

U.S. TSCA

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)</th>
<th>TSCA 8(d) - Health and Safety Reporting</th>
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</thead>
<tbody>
<tr>
<td>Butylated Hydroxytoluene</td>
<td>128-37-0</td>
<td>Not Applicable</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

Canada

WHIMIS 2015 - GHS Classifications

WHIMIS 2015 Hazard Classification Information:

Component
Butylated Hydroxytoluene
128-37-0 (100)

WHIMIS 2015 Hazard Classification
Combustible Dust - Category 1: May form combustible dust concentrations in air (factors such as combustibility and explosiveness of dusts including composition and shape and size of particles could cause substance to belong to ‘Combustible Dust’ hazard class)

Canada Hazardous Products Regulation
This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

DSL/NDSL

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Canada (DSL)</th>
<th>Canada (NDSL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butylated Hydroxytoluene</td>
<td>128-37-0</td>
<td>Present</td>
<td>Not Listed</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>CEPA Schedule I - Toxic Substances</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butylated Hydroxytoluene</td>
<td>128-37-0</td>
<td></td>
</tr>
</tbody>
</table>

Product code: B1196
Product name: BUTYLATED HYDROXYTOLUENE, GRANULAR, NF
<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Classification</th>
<th>Concentration Limits:</th>
<th>Safety Phrases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Butylated Hydroxytoluene</td>
<td>128-37-0</td>
<td>EU GHS - SV - CLP (1272/2008)</td>
<td>No information</td>
<td></td>
</tr>
</tbody>
</table>

**EU Classification**

**EU GHS - SV - CLP 1272/2008**

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS No</th>
<th>Classification</th>
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<th>Safety Phrases</th>
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<td>EU GHS - SV - CLP (1272/2008)</td>
<td>No information</td>
<td></td>
</tr>
</tbody>
</table>

**EU - CLP (1272/2008)**

**R-phrase(s)**
R22 - Harmful if swallowed
R36/38 - Irritating to eyes and skin

**S-phrase(s)**
S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S46 - If swallowed, seek medical advice immediately and show this container or label
S37/39 - Wear suitable gloves and eye/face protection

The product is classified in accordance with Annex VI to Directive 67/548/EEC

**Indication of danger:**
Xn - Harmful
Xi - Irritant

Xn  
Xi

**16. OTHER INFORMATION**

**Preparation Date:** 4/24/2014  
**Revision date** 7/31/2019  
**Prepared by:** Sonia Owen

**Disclaimer:**
All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on

**Product code:** B1196  
**Product name:** BUTYLATED HYDROXYTOLUENE, GRANULAR, NF  
**Page:** 12 / 13
technical data judged to be reliable, Spectrum assumes no responsibility for the
completeness or accuracy of the information contained herein.

End of Safety Data Sheet
Certification of Compliance with current Good Manufacturing Practices

Dear Valued Customer:

Spectrum Chemical Mfg Corp certifies that the following product(s) is produced, processed, packaged and held in compliance with current Good Manufacturing Practices (cGMP) in accordance with the applicable parts of 21 CFR, parts 210 and 211 of the Code of Federal Regulations.

<table>
<thead>
<tr>
<th>Catalog Number</th>
<th>Product Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>B1196</td>
<td>Butylated Hydroxytoluene, Granular, NF</td>
</tr>
</tbody>
</table>

Spectrum is an FDA registered and inspected Drug Establishment. Our United States Food and Drug Administration (USFDA) Registration numbers are as follows:

Spectrum-Gardena, CA: 2020632
Spectrum-New Brunswick, NJ: 2246824

Thank you for your interest in Spectrum products. If we may be of further assistance, please feel free to contact the Quality Assurance department at 310-516-8000 or via email at qualityassurance@spectrumchemical.com

Sincerely,

Oralia Chavez
Quality Assurance Specialist
Source Statement
The above mentioned catalog item is manufactured by chemical synthesis. No animal or plant derived products are used in the manufacturing process.

BSE/TSE Statement
The above mentioned catalog item does not contain nor is manufactured using any animal derived products and is therefore, BSE/TSE free.

Allergen Statement
The above mentioned catalog item does not contain any of the following:

- Milk
- Egg
- Fish
- Shellfish
- Tree Nuts
- Wheat
- Peanuts
- Soy
- Cereals containing Gluten
- Celery
- Mustard
- Sesame Seed
- Corn
- Latex
- Sulfites > 10 ppm

EU Fragrance Allergen Statement
The above mentioned catalog item does not contain any of the 26 EU fragrance allergens listed in Annex III lines 67-92. These substances are not intentionally added to the following chemical and therefore are not expected to be present.

GMO Statement
The above mentioned catalog item is manufactured without the use of genetically modified organisms and is therefore GMO free.

Melamine Statement
The above mentioned catalog does not use or add melamine to the manufacturing process and is considered melamine-free.
Nitrosamine Statement
Based on knowledge of the manufacturing process, nitrosamine impurities are not known or suspected to be present in this material.

Animal Testing Statement
The above mentioned catalog item has not been tested on animals.

Organic Compliance Statement
The above mentioned catalog item has not been produced using GMOs, irradiation, ethylene oxide (EtO) or sewage sludge.

Shelf Life Statement
The above mentioned catalog item is typically assigned a shelf life of 36 months from the date of manufacture. The actual assigned shelf life for any specific lot should be referenced on the Certificate of Analysis.

Other Chemicals Statement
Spectrum does not have any reason to suspect the above mentioned catalog item contains any of the following chemicals. This product does not come into contact with these chemicals during packaging or storage:

- Aflatoxins
- Antibiotics
- Bisphenol A (BPA)
- CMR Substances
- Parabens
- Pesticides
- Phthalates
- Preservatives
RE: Elemental Impurities - Butylated Hydroxytoluene, Granular, NF (Cat# B1196)

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above material complies with the USP<232>, <233> Elemental Impurities and the ICH Q3D Elemental Impurities Guideline. The following elemental impurities are likely to be present:

<table>
<thead>
<tr>
<th>Elemental Impurity</th>
<th>Class</th>
<th>Expected Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Pb</td>
<td>1</td>
<td>&lt; 0.5 ppm</td>
</tr>
<tr>
<td>Arsenic As</td>
<td>1</td>
<td>&lt; 1.5 ppm</td>
</tr>
</tbody>
</table>

Other elemental impurities considered by USP <232>, <233> and ICH Q3D which are not addressed in the above mentioned table are not likely to be present. These substances are not used in the production process, are not intentionally added or known to be present in the above mentioned material.

This information is subject to change and is intended for risk assessment only. It is responsibility of the end user to evaluate suitability of any chemical for the intended use as well as to assess compound-specific limits of daily intake of metal impurities. For lot-specific information, please refer to the respective Certificate of Analysis.

If you have any further questions, please contact us by telephone at 1(800)772-8786 Option 2, or by email at TechServices@spectrumchemical.com.

Sincerely,

Technical Services
Spectrum Chemical Mfg. Corp.

This document has been produced electronically and is valid without a signature.
RE: Residual Solvents - Butylated Hydroxytoluene, Granular, NF (Cat# B1196)

To Whom It May Concern:

Thank you for your interest in Spectrum high quality chemicals.

The above mentioned catalog item complies with the requirements of the USP <467> Residual Solvents and the ICH Q3C Residual Solvents Guideline. No Class 1, Class 2, Class 3 or other solvents are used or produced in the manufacture of this product.

For lot-specific information, please refer to the respective Certificate of Analysis.

If you have any further questions, please contact us by telephone at 1(800)772-8786 Option 2, or by email at TechServices@spectrumchemical.com.

Sincerely,

Technical Services
Spectrum Chemical Mfg. Corp.

This document has been produced electronically and is valid without a signature.
Butylated Hydroxytoluene (2,6-Di-tert-butyl-p-cresol) Granular, NF
CAS 128-37-0

CAUTION: For manufacturing, processing or repacking. Read and understand the label and Safety Data Sheet (SDS) prior to use.

WARNING
• Harmful if swallowed • Causes serious eye irritation • Causes skin irritation.
• Do not eat, drink or smoke when using this product • Wear protective gloves, eye protection, face protection • Wash face, hands and any exposed skin thoroughly after handling.

FIRST AID:
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
IF ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical attention.
IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.

Keep from children

Empirical Formula, Formula Weight and Technical Specifications Panel
Chemical Abstracts Service (CAS) Registry Number
Caution Information
DOT Shipping Information
Toll-Free 24-Hour Chemical Emergency Telephone Number

Spectrum Chemical Mfg Corp

Corporate Headquarters: 769 Jersey Ave. New Brunswick, NJ 08901 732.214.1300
West Coast Facility: 14422 S. San Pedro St. Gardena, CA 90248 310.516.8000
RE: Lot Numbering System

Dear Valued Customer:

This letter is to inform you of Spectrum Chemicals and Laboratory Products’ Lot Numbering System. The system is based on an alpha-numerical sequence which provides the month, year and location of production.

The lot numbering system utilized until 2010 is a sequence of six characters, two letters followed by four numbers. The first letter represents the year, for example, Y denotes 2009 and Z denotes 2010. The second letter represents the month and site, for example, A-L denotes January through December at Spectrum’s Gardena, CA facility, while M-X denotes January through December at the New Brunswick, NJ facility. The following four numbers are sequentially assigned.

Example: ZI0928 = The 928th material produced in California in September 2010

The lot numbering system utilized for 2011 and forward, is a sequence of seven characters. The first character, a number, represents the production facility:

1 = Gardena, CA Facility
2 = New Brunswick, NJ Facility
3 = China Facility
4 = Pharmacy, NJ Facility

The second character, a letter, represents the year. For example, A denotes 2011 and B denotes 2012. The third character, a letter, represents the month, with A denoting January and L denoting December. The following four numbers are sequentially assigned.

Example: 2AA0706 = The 706th material produced in New Jersey in January 2011

Thank you for your interest with Spectrum products. Please feel free to contact us at 310-516-8000 or via email at quality_assurance@spectrumchemical.com if we may be of further assistance.

Sincerely,

Oralia Chavez
Quality Assurance Specialist
The following product(s) prepared by the named company are certified kosher with the stated requirements:

**Spectrum Laboratory Products, Inc.**  
S-0032

14422 S. San Pedro Street  
Gardena CA 90248  
USA

<table>
<thead>
<tr>
<th>Product Name</th>
<th>B1196, BHT, Granular, NF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand</td>
<td>Spectrum</td>
</tr>
<tr>
<td>UKD-ID</td>
<td>KSAV3-K8J4A64</td>
</tr>
<tr>
<td>D/P/M</td>
<td>P</td>
</tr>
<tr>
<td>Symbol Required</td>
<td>KSA</td>
</tr>
</tbody>
</table>

This certificate expires on  
Feb 01, 2022

Rabbi Binyomin Lisbon  
Kashrus Administrator

Placing the KSA logo on products not listed above constitutes an unauthorized use of the KSA symbol, which is a federally registered trademark.
This is to certify that the following product(s) have been produced under the supervision of the Islamic Food and Nutrition Council of America (IFANCA). The production facility as well as component ingredients have been reviewed and approved. The product(s) are in compliance with the halal requirements under Islamic laws.

Date: July 16, 2020
Document #: 11205.11209.II201202

<table>
<thead>
<tr>
<th>Product Name</th>
<th>Product Code</th>
<th>Halal-ID</th>
<th>Product Certificate #</th>
</tr>
</thead>
<tbody>
<tr>
<td>BHT, Granular, NF</td>
<td>B1196</td>
<td>B93984</td>
<td>HC-20SPQ318</td>
</tr>
</tbody>
</table>

Company Name & Address: Spectrum Laboratory Products, Inc. 755-769 Jersey Ave New Brunswick, New Jersey 08901 USA

Plant Name & Address: Spectrum Laboratory Products, Inc. 14422 South San Pedro Street Gardena, California 90248 USA

Muhammad Munir Chaudry, Ph.D.
President

This Certificate is valid until **August 31, 2021** and subject to renewal at that time.