1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier
Product Name 2-tert-Butyl-5-methylphenol
Product Code SC-230669

Recommended use of the chemical and restrictions on use
For research use only. Not intended for diagnostic or therapeutic use.

2. HAZARDS IDENTIFICATION

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

Classification
Acute toxicity - Oral Category 4
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Specific target organ toxicity (single exposure) Category 3
Corrosive to metals Category 1

Label elements
Signal word Warning
Hazard statements Harmful if swallowed
Causes skin irritation
Causes serious eye irritation
May cause respiratory irritation
May be corrosive to metals

Symbols/Pictograms

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
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Keep only in original container
Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
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 advice/attention
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
Call a POISON CENTER or doctor/physician if you feel unwell
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Absorb spillage to prevent material damage

Precautionary Statements - Storage
Store in corrosive resistant container with a resistant inner liner

Precautionary Statements - Disposal
Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)
Hazards not otherwise classified (HNOC) Not applicable

Other Information

NFPA Health hazards 2
Flammability 1
Stability 0
Physical and chemical properties

HMIS Health hazards 2
Flammability 1
Physical hazards 0
Personal protection

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No</th>
<th>Weight %</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-tert-Butyl-5-methylphenol</td>
<td>88-60-8</td>
<td>&gt;98</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

First Aid Measures
General advice Consult a physician if necessary. Remove to fresh air.
Eye contact Wash with plenty of water.
Skin Contact Wash skin with soap and water.
Inhalation Remove to fresh air If breathing is difficult, give oxygen If not breathing, give artificial respiration
Ingestion Never give anything by mouth to an unconscious person. Clean mouth with water.

Most important symptoms and effects, both acute and delayed
Symptoms No information available.

Indication of any immediate medical attention and special treatment needed
Note to physicians Treat symptomatically.
5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Unsuitable Extinguishing Media**

None.

**Specific hazards arising from the chemical**

Specific hazards arising from the chemical

No information available.

Hazardous combustion products

Carbon oxides.

**Explosion data**

Sensitivity to Mechanical Impact

No information available.

Sensitivity to Static Discharge

No information available.

**Protective equipment and precautions 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, especially in confined areas.

**Environmental precautions**

See Section 12 for additional Ecological Information.

**Methods and material for containment and cleaning up**

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

**Precautions for safe handling**

Advice on safe handling

Handle in accordance with good industrial hygiene and safety practice.

**Conditions for safe storage, including any incompatibilities**

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Store at room temperature.

Incompatible materials

None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

Exposure Guidelines

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Engineering Controls
- Showers
- Eyewash stations
- Ventilation systems

**Individual protection measures, such as personal protective equipment**
- **Eye/face protection**
  - Wear safety glasses with side shields (or goggles).
- **Skin and Body Protection**
  - Wear protective gloves and protective clothing.
- **Respiratory protection**
  - If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

**General Hygiene Considerations**
- Handle in accordance with good industrial hygiene and safety practice.

---

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Physical State</strong></td>
<td>liquid</td>
</tr>
<tr>
<td><strong>Appearance</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Odor</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>pH</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Melting point/freezing point</strong></td>
<td>20 °C</td>
</tr>
<tr>
<td><strong>Boiling point</strong></td>
<td>117 °C</td>
</tr>
<tr>
<td><strong>Flash point</strong></td>
<td>106 °C CC (closed cup)</td>
</tr>
<tr>
<td><strong>Density</strong></td>
<td>0.96 g/cm³</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Upper flammability limits</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Lower flammability limit</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Vapor pressure</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Vapor density</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Specific gravity</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Solubility in other solvents</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Water solubility</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Partition coefficient</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Autoignition temperature</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Decomposition temperature</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Kinematic viscosity</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Explosive properties</strong></td>
<td>No information available</td>
</tr>
<tr>
<td><strong>Oxidizing properties</strong></td>
<td>No information available</td>
</tr>
</tbody>
</table>

---

### 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Property</th>
<th>Values</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reactivity</strong></td>
<td>Not applicable</td>
</tr>
<tr>
<td><strong>Chemical stability</strong></td>
<td>Stable under recommended storage conditions.</td>
</tr>
<tr>
<td><strong>Possibility of Hazardous Reactions</strong></td>
<td>None under normal processing.</td>
</tr>
<tr>
<td><strong>Hazardous polymerization</strong></td>
<td>No information available.</td>
</tr>
<tr>
<td><strong>Conditions to avoid</strong></td>
<td>Extremes of temperature and direct sunlight.</td>
</tr>
<tr>
<td><strong>Incompatible materials</strong></td>
<td>Strong oxidizing agents.</td>
</tr>
<tr>
<td><strong>Hazardous Decomposition Products</strong></td>
<td>Carbon oxides.</td>
</tr>
</tbody>
</table>

---

### 11. TOXICOLOGICAL INFORMATION

**Information on likely routes of exposure**
- **Inhalation**
  - No data available.
- **Eye contact**
  - No data available.
Skin Contact
   No data available.
Ingestion
   No data available.

Information on toxicological effects
Symptoms
   No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure
Chronic Toxicity
   No information available.

Numerical measures of toxicity - Product Information
Unknown acute toxicity
   No information available
The following values are calculated based on chapter 3.1 of the GHS document
   \( \text{ATEmix (oral)} = 500 \text{ mg/kg} \)

12. ECOLOGICAL INFORMATION
Ecotoxicity
   May cause long lasting harmful effects to aquatic life
100% of the mixture consists of components(s) of unknown hazards to the aquatic environment.
Persistence and degradability
   No information available.
Bioaccumulation
   No information available.
Mobility
   No information available.

13. DISPOSAL CONSIDERATIONS
Disposal of wastes
   Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging
   Do not reuse container.
US EPA Waste Number
   D002

14. TRANSPORT INFORMATION

**DOT**
UN/ID no
   UN3145
Hazard Class
   8
Packing Group
   III
Proper shipping name
   Alkylphenols, liquid, n.o.s.
Description
   UN3145, Alkylphenols, liquid, n.o.s., 8, III
Emergency Response Guide Number
   153

**IMDG**
UN/ID no
   UN3145
Hazard Class
   8
Packing Group
   III
Proper shipping name
   Alkylphenols, liquid, n.o.s.
Description
   UN3145, Alkylphenols, liquid, n.o.s., 8, III
Special Provisions
   223
EmS-No
   F-A, S-B

**IATA**
UN/ID no          UN3145
Hazard Class     8
Packing Group    III
Proper shipping name Alkylphenols, liquid, n.o.s.
Description     UN3145, Alkylphenols, liquid, n.o.s., 8, III

15. REGULATORY INFORMATION

International Inventories
All of the components in the product are on the following Inventory lists
TSCA (United States): Canada (DSL/NDSL) Europe (EINECS/ELINCS/NLP) Australia (AICS) South Korea (KECL): China (IECSC)
ENCS (Japan): Philippines (PICCS)

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>TSCA</th>
<th>DSL</th>
<th>NDSL</th>
<th>EINECS</th>
<th>ELINCS</th>
<th>ENCS</th>
<th>IECSC</th>
<th>KECL</th>
<th>PICCS</th>
<th>AICS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-tert-Butyl-5-methylphenol</td>
<td>X</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>

X - Listed
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

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 No
Chronic Health Hazard No
Fire hazard No
Sudden release of pressure hazard No
Reactive hazard No

CWA (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).

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations
This product does not contain any substances regulated by state right-to-know regulations

16. OTHER INFORMATION

Revision note No information available
Disclaimer
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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 process, unless specified in the text.

End of Safety Data Sheet