MATERIAL SAFETY DATA SHEET
p-tert-BUTYLPHENOL

1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: p-tert-Butylphenol
Synonyms: p-terc.Butylfenol (Czech), Butylphen, p-tert-Butylphenol, 4-t-Butylphenol, 4-(1,1-Dimethylethyl)phenol, 1-Hydroxy-4-tert-butylbenzene, Phenol, 4-(1,1-dimethylethyl)-, PTBP, Ucar butylphenol 4-T flake, Ucar butylphenol 4-T

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2 - COMPOSITION, INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name:</th>
<th>%</th>
<th>EINECS#</th>
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<tbody>
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<td>98-54-4</td>
<td>p-tert-Butylphenol</td>
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3 - HAZARDS IDENTIFICATION

Special Indication Of Hazards To Humans And The Environment
Irritating to respiratory system and skin. Risk of serious damage to eyes. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4 - FIRST AID MEASURES

Eyes: In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.
Skin: In case of contact, immediately wash skin with soap and copious amounts of water.
Ingestion: If swallowed, wash out mouth with water provided person is conscious. Call a physician.
Inhalation: If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician:

5 - FIRE FIGHTING MEASURES

Conditions Of Flammability: Under fire conditions, material may decompose to form flammable and/or explosive mixtures in air.
Extinguishing Media Suitable: Carbon dioxide, dry chemical powder, or appropriate foam. Water may be ineffective.
Specific Hazard(s): Emits toxic fumes under fire conditions.
6 - ACCIDENTAL RELEASE MEASURES

**Procedure(S) Of Personal Precaution(S):** Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

**Methods For Cleaning Up:** Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7 – HANDLING AND STORAGE

**Handling:** Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

**Storage:** Keep tightly closed.

8 – EXPOSURE CONTROLS, PERSONAL PROTECTION

**Engineering Controls:** Safety shower and eye bath. Mechanical exhaust required.

**General Hygiene Measures:** Wash thoroughly after handling.

**Exposed Limits - Denmark**
- Source Type: OEL TWA
- Value: 0.5 mg/m3
- Remark: H

**Exposed Limits - Germany**
- Source Type: TRGS 900 OEL
- Value: 0.5 mg/m3
- Remark: 4

**Exposed Limits - Switzerland**
- Source Type: OEL OEL
- Value: 0.5 mg/m3
- Remark: M

**Personal Protective Equipment**

**Respiratory Protection:** Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

**Hand Protection:** Compatible chemical-resistant gloves.

**Eye Protection:** Chemical safety goggles.

9 - PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Solid

**Melting Point:** 95-98 °C

**Molecular Formula:** C₁₀H₁₄O

**Molecular Weight:** 150.22
10 - STABILITY AND REACTIVITY

Stability: Stable
Materials to Avoid: Bases, Acid chlorides, Acid anhydrides, Oxidizing agents, Brass Copper, Copper alloys.

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.
Hazardous Polymerization: Will not occur

11 - TOXICOLOGICAL INFORMATION

Rtecs Number: SJ8925000
Acute Toxicity:
- LD50 Oral Rat 3250 UL/KG
- LD50 Intraperitoneal Rat 225 MG/KG
- LD50 Intraperitoneal Mouse 78 MG/KG
- LD50 Skin Rabbit 2520 UL/KG
- LD50 Oral Mammal 1500 mg/kg
- LD50 Skin Mammal 1580 mg/kg

Irritation Data
- Skin Rabbit 500 mg 4H, Remarks: Mild irritation effect
- Skin Rabbit 500 mg 24H, Remarks: Mild irritation effect
- Eyes Rabbit 10 mg, Remarks: Severe irritation effect
- Eyes Rabbit 0.05 mg 24H, Remarks: Severe irritation effect

Signs And Symptoms Of Exposure: To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Dizziness. Exposure can cause:

Route Of Exposure
- Skin Contact: Causes skin irritation.
- Skin Absorption: May be harmful if absorbed through the skin.
- Eye Contact: Causes severe eye irritation.
- Inhalation: Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
- Ingestion: May be harmful if swallowed.

Chronic Exposure - Carcinogen
Hamster
- Route of Application: Oral
- Exposure Time: 20W
- Result: Tumorigenic: Neoplastic by RTECS criteria.
- Gastrointestinal: Tumors.

12 - ECOLOGICAL INFORMATION

Ecotoxicological Effects
Test Type: LC50 Fish  
Species: Pimephales promelas (Fathead minnow)  
Time: 96 h  
Value: 5.14 mg/l

### 13 - DISPOSAL CONSIDERATIONS

**Substance Disposal:** Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

### 14 - TRANSPORT INFORMATION

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<th>IATA</th>
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### 15 - REGULATORY INFORMATION

**Classification And Labeling According To Eu Directives**

**Indication Of Danger:** Xi-N Irritant. Dangerous for the environment.

**R-Phrases:** 37/38-41-51/53 Irritating to respiratory system and skin. Risk of serious damage to eyes. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**S-Phrases:** 26-39-61 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection. Avoid release to the environment. Refer to special instructions/safety data sheets.

### 16 - ADDITIONAL INFORMATION

**SISCO RESEARCH LABORATORIES** provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.