



## SAFETY DATA SHEET

### 1. IDENTIFICATION

**Product name:** 4-tert-Butylphenol  
**Product code:** B0230  
**Company:** TOKYO CHEMICAL INDUSTRY CO., LTD.  
**Address:** 4-10-2, Nihonbashi-honcho, Chuo-ku, Tokyo 103-0023, Japan  
**Responsible department:** Global Business Department  
**Telephone:** +81-3-5640-8872  
**Fax:** +81-3-5640-8902  
**e-mail:** globalbusiness@TClchemicals.com  
**Revision number:** 13

### 2. HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

##### PHYSICAL HAZARDS

Not classified

##### HEALTH HAZARDS

Acute toxicity (Oral)

Category 5

Acute toxicity (Dermal)

Category 5

Skin corrosion/irritation

Category 1C

Serious eye damage/eye irritation

Category 1

Skin sensitization

Category 1

Reproductive toxicity

Category 2

Specific target organ toxicity

Respiratory tract irritation

- Single exposure [Category 3]

Specific target organ toxicity

Liver, Thyroid gland

- Repeated exposure [Category 1]

##### ENVIRONMENTAL HAZARDS

Acute aquatic hazard

Category 2

Long-term aquatic hazard

Category 2

#### Label elements

##### Pictograms or hazard symbols



##### Signal word

Danger

##### Hazard statements

May be harmful if swallowed or in contact with skin  
Causes severe skin burns and eye damage  
May cause an allergic skin reaction  
Suspected of damaging fertility or the unborn child  
Causes damage to organs through prolonged or repeated exposure : Liver Thyroid gland  
May cause respiratory irritation  
Toxic to aquatic life  
Toxic to aquatic life with long lasting effects

##### Precautionary statements:

## 2. HAZARDS IDENTIFICATION

### [Prevention]

Obtain special instructions before use.  
Do not handle until all safety precautions have been read and understood.  
Do not breathe dust/fume/gas/mist/vapours/spray.  
Use only outdoors or in a well-ventilated area.  
Avoid release to the environment.  
Do not eat, drink or smoke when using this product.  
Contaminated work clothing should not be allowed out of the workplace.  
Wash hands thoroughly after handling.  
Wear protective gloves/eye protection/face protection.

### [Response]

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.  
If skin irritation or rash occurs: Get medical advice/attention.  
Wash contaminated clothing before reuse.  
Immediately call a POISON CENTER or doctor/physician.  
Collect spillage.

### [Storage]

Store in a well-ventilated place. Keep container tightly closed.  
Store locked up.

### [Disposal]

Dispose of contents/container through a waste management company authorized by the local government.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

<b>Substance/mixture:</b>	Substance
<b>Components:</b>	4-tert-Butylphenol
<b>Percent:</b>	>98.0%(GC)
<b>CAS Number:</b>	98-54-4
<b>Chemical Formula:</b>	C <sub>10</sub> H <sub>14</sub> O
<b>Notice Through Official Gazettes Reference Number</b>	
<b>ENCS:</b>	(3)-503
<b>ISHL:</b>	Official announcement chemistry substance.

## 4. FIRST-AID MEASURES

<b>Inhalation:</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
<b>Skin contact:</b>	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.
<b>Eye contact:</b>	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
<b>Ingestion:</b>	Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.
<b>Protection of first-aiders:</b>	A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

## 5. FIRE-FIGHTING MEASURES

<b>Suitable extinguishing media:</b>	Dry chemical, foam, water spray, carbon dioxide.
<b>Precautions for firefighters:</b>	Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the surroundings: Remove movable containers if safe to do so.
<b>Special protective equipment for firefighters:</b>	When extinguishing fire, be sure to wear personal protective equipment.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures:** Use extra personal protective equipment (P3 filter respirator for toxic particles). Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.
- Environmental precautions:** Be careful not to let it flow into rivers, etc., since adverse effects on the environment are concerned.
- Methods and materials for containment and cleaning up:** Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

- Technical measures:** Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent dispersion of dust. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated.
- Advice on safe handling:** Avoid all contact!

### Conditions for safe storage, including any incompatibilities

- Storage conditions:** Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store locked up. Store away from incompatible materials such as oxidizing agents.
- Packaging material:** Comply with laws.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** Install a closed system or local exhaust. Also install safety shower and eye bath.

**Control parameters:** Not set up

### **Personal protective equipment**

- Respiratory protection:** Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
- Hand protection:** Impervious gloves.
- Eye protection:** Safety goggles. A face-shield, if the situation requires.
- Skin and body protection:** Impervious protective clothing. Protective boots, if the situation requires.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

- Physical state (20°C):** Solid
- Form:** Crystal- Powder
- Colour:** White - Slightly pale yellow
- Odour:** No data available
- pH:** No data available
- Melting point/freezing point:** 99°C
- Boiling point/range:** 238°C
- Flash point:** No data available
- Flammability or explosive limits:**
- Lower:** 1.8%
- Upper:** 8.6%
- Relative density:** No data available
- Solubility(ies):**
- [Water]** Insoluble
- [Other solvents]**
- Soluble:** Ether, Alcohols

## 10. STABILITY AND REACTIVITY

- Chemical stability:** Stable under proper conditions.
- Possibility of hazardous reactions:** No special reactivity has been reported.
- Incompatible materials:** Oxidizing agents

## 10. STABILITY AND REACTIVITY

**Hazardous decomposition products:** Carbon monoxide, Carbon dioxide

## 11. TOXICOLOGICAL INFORMATION

**Acute Toxicity:** orl-rat LD50:3250 uL/kg  
skn-rbt LD50:2520 uL/kg

**Skin corrosion/irritation:** No data available

**Serious eye damage/irritation:** No data available

**Germ cell mutagenicity:** No data available

**Carcinogenicity:**

**IARC =** No data available

**NTP =** No data available

**Reproductive toxicity:** No data available

**RTECS Number:** SJ8925000

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:**

**Fish:** No data available

**Crustacea:** No data available

**Algae:** No data available

**Persistence / degradability:** 0% (by BOD)  
\*The substance was determined as "Non-biodegradability" under the Chemical Substances Control Law.

**Bioaccumulative potential(BCF):** 20 - 43(conc. 40 ug/L), <48 - 68(conc. 4 ug/L)  
\*The substance was determined as "Low bioconcentration " under the Chemical Substances Control Law.

**Mobility in soil**

**Log Pow:** No data available

**Soil adsorption (Koc):** No data available

**Henry's Law constant(PaM<sup>3</sup>/mol):** No data available

## 13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

## 14. TRANSPORT INFORMATION

**Hazards Class:** 8: Corrosive.

**UN-No:** 2430

**Proper shipping name:** Alkylphenols, solid, n.o.s.

**Packing group:** III

**Marine pollutant** Y

## 15. JAPANESE REGULATORY INFORMATION

**Law for safety of vessels:** Hazardous materials notification, Schedule form No.1 Corrosive substance

**Pollutant Release and Transfer Register Law:** on Designated Chemical Substances, Class I List(No.368)

## 16. OTHER INFORMATION

**The reference company name of written contents**

**Company:** TOKYO CHEMICAL INDUSTRY CO., LTD.

**Address:** 4-10-2, Nihonbashi-honcho, Chuo-ku, Tokyo 103-0023, Japan

**Department:** Global Business Department

**Telephone:** +81-3-5640-8872

**16. OTHER INFORMATION****Fax:****+81-3-5640-8902**

This SDS was prepared sincerely on the basis of the information we could obtained, however, any warranty shall not be given regarding the data contained and the assessment of hazards and toxicity. Prior to use, please investigate not only the hazards and toxicity information but also the laws and regulations of the organization, area and country where the products are to be used, which shall be given the first priority.

The products are supposed to be used promptly after purchase in consideration of safety. Some new information or amendments may be added afterwards. If the products are to be used far behind the expected time of use or you have any questions, please feel free to contact us. The stated cautions are for normal handling only. In case of special handling, sufficient care should be taken, in addition to the safety measures suitable for the situation. All chemical products should be treated with the recognition of "having unknown hazards and toxicity", which differ greatly depending on the conditions and handling when in use and/or the conditions and duration of storage. The products must be handled only by those who are familiar with specialized knowledge and have experience or under the guidance of those specialists throughout use from opening to storage and disposal. Safe usage conditions shall be set up on each user's own responsibility.