



InterTrade(Singapore)Chemicals Pte Ltd

MATERIAL SAFETY DATA SHEET

1) CHEMICAL PRODUCT IDENTIFICATION

TRADE NAME: PARA-TERT-BUTYLPHENOL
CAS : 98-54-4

2) HAZARDS IDENTIFICATION

Appearance: White to almost white solid

WARNING: Causes eye, skin, and respiratory tract irritation. May cause allergic respiratory and skin reaction. Hygroscopic (absorbs moisture from the air).

Target Organs: Respiratory system, eyes, skin

Potential Health Effects

Eyes: Causes severe eye irritation.

Skin: Causes skin irritation. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

Ingestion: Causes gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: Causes respiratory tract irritation. In rare instances, exposure may cause sensitization, resulting in inflammation of the mucous membranes and in eczematous eruptions.

Chronic: Repeated or prolonged exposure may cause allergic reactions in sensitive individuals.

3) FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

Skin: Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before re-use.

Ingestion: Never give anything by mouth to an unconscious person. Get medical aid. DO NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. DO NOT use mouth to mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively.



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4) FIRE FIGHTING MEASURES

General Information: As in any fire, wear a self-contained breathing apparatus in pressure demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use agent most appropriate to extinguish fire. DO NOT get water inside containers. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: 113 deg c(235.40 deg F)

Auto ignition Temperature: 510 deg C (950 deg F).

Explosion Limits, Lower : Not available.

Upper: Not available.

NFPA Rating : (estimated) Health: 2, Flammability: 1, Instability: 0

5) ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 7

Spills/ Leaks: Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up, then place into a suitable container for disposal. Avoid generating dusty conditions. Provide ventilation. Do not get water inside containers.

6) HANDLING AND STORAGE

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before re use. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Do not contact with water. Keep from contact with moist air and steam.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.



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7) EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits:

Chemicals Name	ACGIH	NIOSH	OSHA-Final PELs
p-tert-Butylphenol	none-listed	none-listed	none-listed

OSHA Vacated PEL s: P-Tert-Butylphenol: No OSHA vacated PEL s are listed for this chemical.

Personal Protective Equipment

Eyes; Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29CFR 1910.133 or European Standard EN166

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

8) PHYSICAL AND CHEMICAL PRPERTIES

Physical State: Solid

Appearance: white to almost white

Odor: None reported

pH: Not available

Vapor Pressure: 13 hPa @ 115 C

Vapor Density: Not available

Evaporation Rate: Not available

Viscosity: Not available

Boiling Point: 236 – 238 deg C @ 760.00mm Hg

Freezing/Melting Point: 96 – 100 deg C

Decomposition Temperature: Not available

Solubility: soluble in alcohol and ether

Specific Gravity/Density: 9080g/cm³

Molecular Formula: C₁₀H₁₄O

Molecular Weight: 150.22



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9) STABILITY AND REACTIVITY

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, dust generation, moisture, excess heat.

Incompatibilities with Other Materials: Oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Has not been reported.

10) TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 98-54-4: SJ8925000

LD50/LC50:

CAS# 98-54-4

Draize test, rabbit, eye: 10mg Severe

Draize test, rabbit, eye: 50ug/24H Severe

Draize test, rabbit, skin: 500 mg/4H Mild

Draize test, rabbit, skin: 500 mg/24H Mild

Oral, mouse: LD50 = 3250 uL/kg

Oral, rat: LD50 = 2520 uL/kg

Skin, rabbit: LD50 = 2520 uL/kg

Carcinogenicity:

CAS# 98-54-4: Not listed by ACGIH, IARC, NTP, or CA prop 65.

Epidemiology: Oral, hamster : TDLo = 252 gm/kg/20W-C (Tumorigenic-neoplastic by RTECS

criteria – Gastrointestinal – tumors).

Teratogenicity Effects: No information available

Reproductive Effects: No information available

Mutagenicity : No information available.

Neurotoxicity: No information available



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11) ECOLOGICAL INFORMATION

Ecotoxicity: Fish: Fathead Minnow: LC50 = 5.1 mg/L; 96 Hr: unspecified
Water flea Daphnia: EC50 = 4.2 mg/L; 24 Hr: unspecified
Bacteria: Phytobacterium phosphoreum: EC50 = 0.21 mg/L; 5 min; Microtox test

12) DISPOSAL CONSIDERATIONS

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P – Series: None listed

RCRA U – Series: None listed

13) TRANSPORT INFORMATION

	US DOT	Canada TDG
Shipping Name	TOXIC SOLIDS, ORGANIC, N.O.S.	TOXIC SOLID ORGANIC NOS(P-TERT-BUTYLPHENOL)
Hazard Class	6.1	6.1
UN Number	UN2811	UN2811
Packing Group	III	III

14) REGULATORY INFORMATION

US FEDERAL

TSCA

CAS#98-54-4 is listed on the TSCA inventory

Health & Safety Reporting List

None of the chemicals in this product are under a Chemical Test Rule

Section 12b

None of the chemicals are listed under TSCA Section 12b

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ

Section 313

No chemicals are reportable under Section 313



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Clean Air Act

This material does not contain any hazardous air pollutants

This material does not contain any Class 1 Ozone depletors

This material does not contain any Class 2 Ozone depletors

Clean Water Act

None of the chemicals in this product are listed as Hazardous Substances under the CWA

None of the chemicals in this product are listed as Priority Pollutants under the CWA

None of the chemicals in this product are listed as Toxic Pollutants under the CWA

OSHA

None of the chemicals in this products are considered highly hazardous by OSHA

STATE

CAS#98-54-4 is not present on state lists from CA, PA, MN, MA, FL, or NJ

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN

Risk Phrases: R 36/37/38 Irritating to eyes, respiratory system and skin

R 42/43 May cause sensitization by inhalation and skin contact

Safety Phrases: S 22 Do not breathe dust

S 24 Avoid contact with skin

S 26 In case of contact with eyes, rinse immediately with plenty of water and
Seek medical advice

S 36/37/38 Wear suitable protective clothing, gloves and eye/face protection

S 37 Wear suitable gloves

S 45 In case of accident or if you feel unwell, seek medical advice
immediately

S 28A After contact with skin, wash immediately with plenty of water

WGK (Water Danger/Protection)

CAS# 98-54-4 : 2

Canada – DSL/NDSL

CAS# 98-54-4 is listed on Canada's DSL list

Canada- WHMIS

This product has a WHMIS classification of DIA

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 98-54-4 is listed on the Canadian Ingredient Disclosure List



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15) ADDITIONAL INFORMATION

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. User should make their own investigations to determine the suitability of the information for their particular purposes.