



北京极易化工有限公司

JIYI CHEMICAL (BEIJING) CO., LTD.

MATERIAL SAFETY DATA SHEET

2,6-DI-TERT-BUTYL PHENOL (2,6-DTBP)

1. CHEMICAL PRODUCT&COMPANY IDENTIFICATION

PRODUCT NAME: 2,6-DTBP
CHEMICAL NAME : 2,6-Di-tertbutyl Phenol
MANUFACTURER/SUPPLIER: JiYi Chemical (Beijing) Co., Ltd.
Shilou Town of Fangshan District, Beijing, China 102403
Tel: 86 (0) 10 89389018
Fax: 86 (0) 10 89389008
EMERGENCY TELEPHONES: 86 (0) 10 89389018

2. COMPOSITION/IFORMATION ON INGREDIENTS

Ingredient Name	CAS Number	Weight Range	UN No.	Hazard Class
2,6-Di-tertbutyl Phenol	128-39-2	> 99 %	3077	9
Chemical Name / Class	2,6-DI-TERTIARY-BUTYLPHENOL (CAS # 128-39-2)			
PRODUCT DESCRIPTION:	2,6-di-tertbutylphenol: $\geq 99\%$ (w/w)			
	2,4-di-tert-butylphenol: $\leq 0.5\%$ (w/w)			
	Ortho--tert-butylphenol: $\leq 0.1\%$ (w/w)			
	Other alkylated phenols: $\leq 0.1\%$ (w/w)			

PRODUCT USE: Chemical intermediate

3. HAZARDS IDENTIFICATION

Hazard Statements

Irritate to eyes and skin, may cause certain chronic health with long-term contact

EMERGENCY OVERVIEW

To work safely with this material: keep away from heat and ignition sources ,do not get in eyes, on skin or clothing,do not breath in material's vapors, dust, or fumes keep container closed use with adequate ventilation, do not enter any confined spaces without first verifying air quality, wash thoroughly after handling.

Risks

Health Warnings

may affect the liver

Health Cautions



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may cause eye irritation may cause skin irritation may affect mucous membranes may cause blood chemistry changes may cause gastrointestinal disturbances may alter the body's biochemistry may affect the respiratory system.

4. FIRST AID MEASURES

Skin:

Immediately take off all contaminated clothing. For skin contact, flush with large amounts of water. If any adverse effects persist, get medical attention. These symptoms may result from an emergency or an unexpected acute overexposure: rash; irritation

Eyes:

For eye contact, rinse immediately with plenty of water. Seek medical advice. These symptoms may result from an emergency or an unexpected acute overexposure: irritation

Inhalation:

Move person to non-contaminated air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult, give oxygen. Seek medical attention. These symptoms may result from an emergency or an unexpected acute overexposure: irritation, respiratory tract

Ingestion:

If the material is swallowed, get immediate medical attention or advice. Never give anything by mouth to a victim who is unconscious or is having convulsions. If patient has a good gag reflex, you can consider giving several ounces of water for dilution. These symptoms may result from an emergency or an acute overexposure: gastritis

Cardiovascular:

These symptoms may result from an emergency or an unexpected acute overexposure: arrhythmia

Central Nervous System:

Monitor for shock; anticipate seizures and treat accordingly.

Notes to Physician:

Provide general supportive measures and treat symptomatically. Please utilize additional appropriate resources in your area such as a regional Poison Control Center. Additionally, you may find web sites such as <http://www.jiyichem.com> A specific antidote is not known. It's harmless to the healthy, but may become life threatening to whom with serious disease.

5. FIRST FIGHTING MEASURES

FLASH POINT:	>116°C / 240 ° F (PMCC)
Hazardous Combustion Products:	Irritating and toxic gases or fumes may be released during a fire.
Extinguishing Media:	Dry chemical, foam, carbon dioxide, water fog..
Fire Fighting Equipment / Instructions:	Exclude air; treat like a gasoline or oil fire. Wear full protective clothing, including helmet, self-contained positive pressure or pressure demand breathing apparatus, protective clothing and mask.



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General Fire Hazards:

High concentration of airborne dust may form explosive mixture with air. Vapors may be heavier than air and may travel along the ground to some distant source of ignition and flash back.

Sensitivity to Static Discharge

Material can accumulate static charges from material handling management. Bond and ground as appropriate. For additional recommendations, consult National Safety Protection Association and local firehouse.

6. ACCIDENTAL RELEASE MEASURES

Clean-Up Procedures:

Ventilate the contaminated area. Eliminate ignition sources including sources of electrical, static or frictional sparks. Material will be HOT when in a liquid state. Be sure any absorbents used can withstand the temperature. One may wish to allow it to cool before attempting to collect the material using absorbents, non-sparking tools, explosion-proof vacuums or other equipment

required by the size of the release. When material is cool, manage the release as a solid. For example, one can: collect solids, place them into an appropriate container, properly label the container, and then close the container. Immediately arrange for the containers to be placed in an appropriate waste handling area for ultimate transportation or disposal. Thoroughly clean the release area with a suitable agent and collect any cleaning, rinsing media(s) for proper reclamation or disposal. Wear appropriate personal protective equipment during cleanup activities. Sweep up, or gather, material and place in appropriate container(s) applicable for ultimate transportation or disposal. Thoroughly clean the release area with a suitable agent and collect any cleaning, rinsing media(s) for proper reclamation or disposal. Wear appropriate personal protective equipment during cleanup activities.

Containment Procedures:

Stop the flow of material, if this is without risk. Eliminate sources of ignition. Ventilate the contaminated area. Material will be HOT as a liquid. One may consider allowing the material to cool as part of a response plan. Contain the spill and prevent the material from obtaining access to any confined spaces, public sewers, or waterways.

Evacuation Procedures:

Follow facility/company's emergency plans.



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Special Procedures:

Wear appropriate protective equipment and clothing during clean-up. Determine appropriate course of action for the collected material. Regulations vary. Consult local authorities before disposal.

7. HANDLING AND STORAGE

HANDLING:

Guard against dust accumulation of this material. As with all chemicals, good industrial hygiene practices should be followed when handling this material. When the container(s) is empty it may retain product residue including vapors which could accumulate. Therefore, do not cut, drill, grind, or weld empty containers. Additionally, do not conduct such activity(ies) near full, partially full, or empty product containers without appropriate workplace safety authorization(s) or permit(s).

STORAGE CONDITIONS:

Protect container from physical abuse. Keep the container tightly closed. Store in a cool, dry, well-ventilated storage area. Keep separate from incompatibles. Bond and ground containers when transferring material. Empty product containers may contain product residue. Do not reuse empty containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Ventilation should be sufficient to effectively remove, and prevent buildup of, any vapors, dusts, or fumes that may be generated during handling or thermal processing.

Personal Protective Equipment: Eyes/Face

Wear safety glasses with side shields; chemical goggles (if splashing is possible). Wear a face shield if a splash hazard exists. Select & use eye protection per a competent health & safety professional using: OSHA [29 CFR 1910.133] or Europe's [EN166].

Personal Protective Equipment: Skin

Use appropriate hand protection. Wear impervious gloves for prolonged contact.

Personal Protective Equipment: Respiratory

Maintain material's vapors, fumes, or particulate levels below any levels of concern including, for solids, considering the material as a particulate not otherwise classified [nuisance dust] @ 10 mg/m³. No relative regulations can be referred, above is resulted from Ji Yi who refers to international relative regulations

Personal Protective Equipment: General

Utilize good industrial hygiene practices.

Exposure Guidelines

All PPE use is to be determined by a qualified person.

9. PHYSICAL AND CHEMICAL PROPERTIES



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PHYSICAL STATE:	Solid.
APPEARANCE:	White to yellow
SPECIFIC GRAVITY:	0.91 @ 68 °F / 20°C
DENSITY:	7.6 lb/gal
SOLUBILITY IN WATER:	0.03%
Other Solubility Soluble in:	alcohols, esters, alkanes and aromatics (e.g. ethanol, butyl acetate, gasoline, toluene, etc.).
BOILING POINT:	487 °F / 253°C
Melting Point:	97 °F / 36°C
VAPOR PRESSURE:	>Air. 0.35mmHg/70°C, 0.01kpa/20°C
Molecular Formula:	C ₁₄ -H ₂₂ -O
Molecular Weight:	206.33

10. STABILITY AND REACTIVITY

Conditions to Avoid

Avoid ignition sources where dust is produced.

Hazardous Decomposition

Upon decomposition this product emits carbon monoxide, carbon dioxide, and/or low molecular weight hydrocarbons.

Hazardous Polymerization

Will not occur under normal conditions.

Chemical Stability

Stable under normal conditions.

Incompatibilities

2,6-di-tert-butyl phenol may react with strong oxidizers.

11. TOXICOLOGICAL INFORMATION

Routes of Entry:

inhalation ingestion eye contact skin contact

Organs Effected [Target Organs]:

blood liver respiratory system

Acute Skin Contact

Dermal LD50s:

2,6-di-tert-butyl phenol 128-39-2 Dermal LD50 [rabbit]: >10000 mg/kg

Acute Ingestion

Oral LD50:

2,6-di-tert-butyl phenol 128-39-2 Oral LD50 [mouse]: 800 mg/kg

12. ECOLOGICAL INFORMATION



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Aquatic Toxicity: 2,6-di-tert-butyl phenol Aquatic Toxicity: may bioaccumulate.

Environmental Fates: 2,6-di-tert-butyl phenol Artificial Sources: emissions & wastes from its uses as an antioxidant & chemical intermediate. Terrestrial Fate: low mobility; biodegrades. Aquatic Fate: may adsorb to sediments; volatilizes [half-lives: river ~17 days; lake ~130 days]; biodegrades [BOD5 <50 %]. Atmospheric Fate: photochemically degrades [half-life ~8 hours].

13. DISPOSAL INFORMATION

If this product becomes a waste, it is not a hazardous waste.

As a non-hazardous waste, it is not subject to national regulation. Consult state or local regulation for any additional handling, treatment or disposal requirements. For disposal, contact a properly licensed waste treatment, storage, disposal or recycling facility.

14. TRANSPORTATION INFORMATION

Comments

NOTE: The data in this section are provided as a guide for the overall classification of the product. However, transportation classifications may be subject to change as, for example, with changes in package size. Consult shipper requirements under IMO, ICAO (IATA), TDG and 49 CFR to assure regulatory compliance.

Additionally, please address any questions you have concerning the cleaning of containers, or vessels, to Beijing Ji Yi Chemical and Industry Co., Ltd. at 86-10-89389018. Remember that the reuse, treatment, or disposal, of any related residuals or wastes must be in accordance with all national, state, and local environmental regulations.

SURFACE TRANSPORTATION (HIGHWAY/RAIL)

BULK– TANK

TRUCK/TANK CAR

Shipping Name:

Environmentally hazardous substances, solid, n.o.s., molten,(2,6-di-tert-butylphenol)

Hazard Class: 9

Identification Number: UN3077

Packing Group: PG III

DRUM(s)/BAG(s)

Shipping Name: Chemicals n.o.i, not DOT hazardous, 2,6-di-tert-butylphenol

Hazard Class: 9

Identification Number: UN3077

Packing Group: PG III

INTERMEDIATE BULK



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CONTAINER

Shipping Name:

Environmentally hazardous substances, solid, n.o.s., molten,(2,6-di-tert-butylphenol)

PAIL(s)/CAN(s)

Shipping Name: Chemicals n.o.i., not DOT hazardous, 2,6-di-tert-butylphenol

Hazard Class: 9

Identification Number: UN3077

Packing Group: PG III

IMDG CODE (WATER)

BULK-- TANK**TRUCK/TANK CAR****Shipping Name:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MOLTEN (2,6-di-tert-butylphenol)

Hazard Class: 9

Identification Number: UN3077

Packing Group: PG III

DRUM(s)/BAG(s)**Shipping Name:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MOLTEN (2,6-di-tert-butylphenol)

Hazard Class: 9

Identification Number: UN3077

Packing Group: PG III

INTERMEDIATE BULK**CONTAINER****Shipping Name:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MOLTEN (2,6-di-tert-butylphenol)

Hazard Class: 9

Identification Number: UN3077

Packing Group: PG III

PAIL(s)/CAN(s)**Shipping Name:**

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., MOLTEN (2,6-di-tert-butylphenol)

Hazard Class: 9

Identification Number: UN3077



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Packing Group: PG III

ICAO/IATA (AIR)

DRUM(s)/BAG(s)

Shipping Name: Chemicals n.o.i.b.n., not restricted, 2,6-di-tert-butylphenol

PAIL(s)/CAN(s)

Shipping Name: Chemicals n.o.i.b.n., not restricted, 2,6-di-tert-butylphenol

Hazard Class: 9

Identification Number: UN3077

Packing Group: PG III

15. REGULATORY INFORMATION

National Safety Regulations, <http://www.chemnet.com/> antioxidant products list.

No additional information is available.

International Regulations

U.S. Federal Regulations

Inventory - Canada - Domestic Substances List

2,6-di-tert-butylphenol 128-39-2 C₁₄H₂₂O

Inventory - European Inventory of Existing Commercial Chemical Substances

2,6-di-tert-butylphenol 128-39-2 204-884-0; C₁₄H₂₂O

Inventory - Japan - Existing and New Chemical Substances (ENCS)

2,6-di-tert-butylphenol 128-39-2 3-521; 3-526

16. OTHER INFORMATION

Disclaimer

The health and safety information is that available to BJCI as of the date published and BJCI makes no representation of the information's completeness or accuracy. Any data provided is based on either: reference sources, testing performed on a representative sample(s), or professional judgement. The physical data should not be construed as either representing specifications or a guaranteed analysis. This material has been classified in accordance with the hazard criteria of the Controlled Products Regulation and the MSDS contains information required by Controlled Products Regulation. BJCI provides its MSDS in two languages (Chinese & English) using English as the secondary language. While BJCI uses reasonable efforts to provide accurate translations, BJCI assumes no liability, or responsibility, for errors, omissions or ambiguities in any translations. BJCI expects those persons who receive this MSDS to exercise their independent professional judgement, or consult with a competent health/safety professional, to determine how to utilize this material safely. This includes, but is not exclusive to, the material's appropriateness for a specific use, the type of personal protection equipment necessary, and the use of engineering controls. In no event is BJCI liable for any damages whatsoever arising out of your use of this material based upon information obtained from this MSDS including: direct, indirect, incidental, consequential or punitive claims or damages.



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Revision Date: March, 2011

Jiyi Chemical (Beijing) Co., Ltd.

Reference,

- 1.) Jiyi's "Production Safety Operation Regulation",
- 2.) Jiyi's Fire Protection Emergency Management Counterplan,
- 3.) Jiyi's Environment Protection Emergency Management Counterplan,
- 4.) Great Lakes Chemical Corporation
SAFETY DATA SHEET 2,6-DTBP Revision Date 09/04/2003
- 5.) Schenectady International, In.
MATERIAL SAFETY DATA SHEET 2,6-DI-TERT-BUTYLPHENOL (2,6-DTBP)