Safety Data Sheets

Revision Date: 04-Aug.-2015

Section 1. Identification of substance

Product Name：2,4-di-tert-butylphenol (2,4-DTBP)
Synonyms: 2,4-Bis(1,1-dimethylethyl)phenol; 2,4-DTBP; 1-Hydroxy-2,4-di-tert-butylbenzene
CAS No.: 96-76-4
Chemical Formula: $C_{14}H_{22}O$
Manufacturer/Supplier：EXCEL CHEMICAL CORPORATION
Emergency Telephone Numbers： +886-07-6411122 /FAX：+886-07-6411125
e-mail: kc-lai@tascogroup.com.tw
Address：25-9A MORRISON PLAZA.SEC. 4 JEN-AI RD. TAIPEI, TAIWAN 10649, R.O.C.

Section 2. Hazards identification

Hazard Classification

Signal word: Danger

Section 3. Composition/information on ingredients

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Section4. First Aid Measures

General information: Take affected persons out of danger area and lay down.

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Immediately wash with water and soap and rinse thoroughly. If skin irritation continues, consult a doctor.

After eye contact:

Rinse opened eye for several minutes under running water. Call a doctor immediately.

After swallowing:

Rinse out mouth and then drink plenty of water. Get medical advice/attention.

Section 5. Fire Fighting Measures

Suitable extinguishing agents:

CO_2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Use fire fighting measures that suit the environment.

For safety reasons unsuitable extinguishing agents: Water with full jet

Special hazards arising from the substance or mixture

Formation of toxic gases is possible during heating or in case of fire.

In case of fire, the following can be released:

Carbon monoxide

Carbon dioxide

Protective equipment: Wear self-contained respiratory protective device.

Additional information:

Cool endangered receptacles with water spray.

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation

Wear protective clothing.

Avoid formation of dust.

Keep away from ignition sources

Environmental precautions: Do not allow to enter sewers/ surface or ground water.
Methods and material for containment and cleaning up:
Pick up mechanically. Dispose of the collected material according to regulations.

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

Section 7. Handling and Storage

Handling:
Precautions for safe handling
Prevent formation of dust.
Any deposit of dust which cannot be avoided must be regularly removed.
Ensure good ventilation/exhaustion at the workplace.
Information about protection against explosions and fires:
Dust can combine with air to form an explosive mixture.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.

Storage:
Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
Information about storage in one common storage facility: Store away from oxidizing agents.
Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
Specific end use(s) No further relevant information available.

Section 8. Exposure Controls, Personal Protection

Components with limit values that require monitoring at the workplace: Not required.

Additional Occupational Exposure Limit Values for possible hazards during processing:
PEL: 15* 5** mg/m3
* total dust **respirable fraction
REL: 10* 5** mg/m3
* total dust **respirable fraction
TLV: 10 mg/m3
Dust Value

Personal protective equipment:
General protective and hygienic measures:
Do not eat, drink, smoke or sniff while working.
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Avoid contact with the eyes and skin.
The usual precautionary measures for handling chemicals should be followed.

Breathing equipment:
Not necessary if room is well-ventilated.
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands: Protective gloves
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves: Butyl rubber, BR Nitrile rubber, NBR PVC gloves

Penetration time of glove material
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Safety glasses

Body protection: Protective work clothing

Section 9. Physical /Chemical Properties

Appearance: White Crystalline	**Odor:** phenol like
Melting point: 53-56℃	**Boiling point:** 265℃
Flash point: 129℃ (close cup)	**Ignition temperature:** --
Density: 0.877	

Section 10. Stability and Reactivity

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
Incompatible materials: No further relevant information available.
Hazardous decomposition products: No dangerous decomposition products known.

Section11. Toxicological Information

Acute toxicity: LD/LC50 values that are relevant for classification:
LD50: 3250 mg/kg (mouse)

Primary irritant effect:

· on the skin: Irritant to skin and mucous membranes.

· on the eye: Strong irritant with the danger of severe eye injury.

· Sensitization: No sensitizing effects known.

Section 12. Ecological Information

Acquatic toxicity:
EC50 (48h) 1.1 mg/l (Daphnia)
EC50 (5h) > 100 mg/l (Bacteria)
LC50 (48h) 1.8 mg/l (Fish)

· Persistence and degradability No further relevant information available.

Behavior in environmental systems:

· Bioaccumulative potential No further relevant information available.

Additional ecological information:
General notes:
Water hazard class 2 (Self-assessment): hazardous for water
Do not allow product to reach ground water, water course or sewage system.
Very toxic for aquatic organisms

Section 13. Disposal Considerations

Waste treatment methods
Recommendation: Must be specially treated adhering to official regulations.
Uncleaned packagings:
Recommendation: Disposal must be made according to official regulations.

Section 14. Transport Information

ADR/RID
UN-Number: 2430 Class: 8 Packing group: III
Proper shipping name: ALKYLPHENOLS, SOLID, N.O.S. (2,4-di-tert-butylphenol)

IMDG
UN-Number: 2430 Class: 8 Packing group: III
Proper shipping name: ALKYLPHENOLS, SOLID, N.O.S. (2,4-di-tert-butylphenol)

IATA
UN-Number: 2430 Class: 8 Packing group: III
Proper shipping name: ALKYLPHENOLS, SOLID, N.O.S. (2,4-di-tert-butylphenol)

DOT regulations:
UN-Number: 2430 Class: 8 Packing group: III
Proper shipping name: ALKYLPHENOLS, SOLID, N.O.S. (2,4-di-tert-butylphenol)

Section 15. Regulatory Information

Section 16. Additional Information

Remark	” - ” means no data , and ” /” means not suitable.

※ This information is only suitable for this product, and It does not suit that if this product is to be a additive agent or mixed with other chemicals.

※ 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. Users should make their own investigations to determine the suitability of the information for their particular purposes.