

Material Safety Data Sheet

CHEMSORB 328

1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING

Product name : 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol
CAS number : 025973-55-1
Company name : UV Chem-Keys Co., Ltd
RM9-G, F/9, First Trade Tower, 985# Dongfang RD, Shanghai, China
Zip Code: 200122
Tel: 86 21 58785816
Fax: 86 21 58786585

2. Health Hazards Data

CAS Number : 025973-55-1
Product Name : 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol
Content : 100 %
R-Phrase(s) : R48/22 - R53

3. HAZARDS IDENTIFICATION

Harmful : danger of serious damage to health by prolonged exposure if swallowed
May cause long-term adverse effects in the aquatic environment

4. FIRST AID MEASURES (ACTION)

Skin contact : Wash off with soap and plenty of water. Do not use organic solvents
Eye contact : Rinse immediately with plenty of water for at least 15 minutes. In case of eye irritation, seek medical attention
Ingestion : Immediately give plenty (> 500 ml) of water (if possible charcoal slurry). In case of spontaneous vomiting be sure that vomitus can freely drain due of danger of suffocation. Give water repeatedly. Artificial induction of vomiting should be restricted to first aid staff. Give nothing by mouth in cases of unconsciousness or convulsion. Seek medical advice
Inhalation : Move to fresh air. In case of irritation of respiratory system or mucous membranes, seek medical attention. In case of indisposition, seek medical attention. In case of prolonged exposure, seek medical attention.

5. FIRE-FIGHTING MEASURES



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Extinguishing media	:	Water spray, Carbon dioxide (CO ₂), Foam, Dry powder
Extinguishing media which must not be used for safety reasons	:	High volume water jet
Exposure hazards	:	Contaminated water from fire hoses or sprinklers, etc., must be prevented from draining into watercourses, sewers, or the ground water. Sufficient measures must be taken to retain water used for extinguishing. Contaminated water and soil must be disposed of in conformity with local regulations.
Special protective equipment for firefighters	:	Wear full protective clothing. Wear self-contained breathing apparatus.
Hazardous decomposition products	:	Oxides of carbon, Oxides of nitrogen (NO _x), Hydrogen chloride, Toxic gases/vapours

6. ACCIDENTAL RELEASE MEASURES

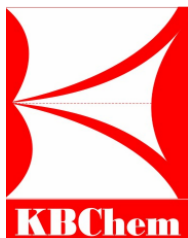
Personal precautions	:	Do not breathe vapours/dust. Remove all sources of ignition. Avoid contact with skin, eyes and clothing.
Environmental precautions	:	Do not flush into surface water, sanitary sewer or ground water system
Methods for cleaning up	:	Use mechanical handling equipment. Collect the spilled product into suitable containers, which must be tightly sealed and properly labelled. Avoid dust formation

7. HANDLING AND STORAGE

Handling	:	Harmful. Handle and open container with care. Avoid dust formation and ignition sources. Ensure good local exhaust ventilation. Do not eat, drink or smoke at the workplace
Storage	:	Keep away from food and drink. Store in the original container securely closed. Danger! Explosion risk. Risk of explosion if an air-dust mixture forms. Avoid creating dusty conditions. Empty only into earthed containers. If container is larger than 2000 liter in volume, or when flammable solvents are present inert container or use a system otherwise designed to prevent or contain an explosion -- seek expert advice

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit(s)	:	Value 2.0 mg/m ³
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*internal exposure limit (8 hour
time weighted average)*

Justification to exposure limit Effects on thyroid, liver and kidney in animal studies

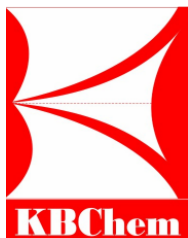
Technical measures/Precautions	:	Exposure limit(s) should be monitored using suitable analytical equipments
Respiratory protection	:	Effective dust mask
Hand protection	:	Protective gloves
Eye protection	:	Suitable goggles or face protection
Skin and body protection	:	Working clothes , Closed footwear

9. PHYSICAL AND CHEMICAL PROPERTIES

Form	:	powder	
Colour	:	yellowish	
Odour	:	odourless	
Melting/freezing° C	:	79 - 87 °C	
Boiling point/range° C	:	not applicable	
Density 20 °C	:	1.17 g/cm ³	
Flash point° C	:	229 °C	DIN 51758
Ignition Temperature	:	390 °C	BAM
Oxidising properties	:	not tested	
Self-ignition temperature	:	not tested	
Water solubility 20 °C	:	20 °C < 0.01 %	
Vapour pressure 20 °C	:	20 °C 4.7E-6 Pa	
Partition coefficient	:	Log Pow 20 - 25°C	> 6
pH-value	:	1 % suspension in water 20 - 25°C	5.8
Explosive properties	:	not explosive	

10. STABILITY AND REACTIVITY

Stability Indicator	:	> 220 °C
Conditions to avoid	:	Static discharges.
Materials to avoid	:	Strong acids, strong bases and strong oxidizing agents.
Haz. decomp. products	:	Oxides of carbon, Oxides of nitrogen (NOx), Hydrogen chloride, Toxic gases/vapours



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11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	:	LD50 > 2000 mg/kg
Rat		
Acute dermal irritation/corrosion	:	not irritant
Rabbit		
Acute eye irritation/corrosion	:	not irritant
Acute skin sensitisation	:	Sensitizing
Guinea pig		

12. ECOLOGICAL INFORMATION

Acute toxicity to fish	:	LC50 > 100 mg/l
<i>Zebra fish (Brachydanio rerio) 96 h</i>		
Acute toxicity to daphnia	:	EC50 > 100 mg/l
<i>Daphnia magna 24 h</i>		
Acute toxicity to bacteria	:	IC50 > 100 mg/l
<i>Sewage sludge 3 h</i>		
Acute toxicity to algae	:	EC50 > 10 mg/l
<i>Scenedesmus sp. 72 h</i>		

Test concentrations were based on the solubility of the substance in test media

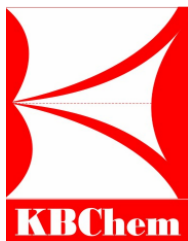
13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products	:	Residual chemical should be disposed by incineration or by other modes of disposal in compliance with local legislation.
Contaminated packaging	:	Contaminated packaging material should be treated equivalent to residual chemical. Clean packaging material should be subjected to waste management schemes (recovery recycling, reuse) according to local legislation.

14. Transport information

Flash point	:	229 °C
ADR/RID Class	:	Free
IMO Class	:	Free
ICAO Class	:	Free

15. REGULATORY INFORMATION



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EC-Number : 247-384-8
Contains : 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol
Classification : Self-classification
Symbol(s) : Xn Harmful
R-Phrase(s) : R48/22 Harmful: danger of serious damage to health by prolonged exposure if swallowed.
R53 May cause long-term adverse effects in the aquatic environment.
S-Phrase(s) : S22 Do not breathe dust.

S36 Wear suitable protective clothing.

S61 Avoid release to the environment. Refer to special instructions/Safety data sheets.

16. Other information

Legal disclaimer : The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.