

MSDS

Product Name: Di-(2,4-dichlorobenzoyl)peroxide-DCBP

Revision date: August 3, 2022

Initial preparation date: August 3, 2022

Compiled according to GB/T 16483 and GB/T 17519

Version: 22-011

Part 1 Chemical and Enterprise Identification

Chemical name: Di-(2,4-dichlorobenzoyl)peroxide-DCBP

Name of manufacturing enterprise: Taian Trendsum Chemicals Co.,Ltd.

Address:

Postal Code: 271400

Fax number:

Enterprise emergency hotline:

e-mail address:

National emergency hotline:

Part 2 Overview of Hazards

Overview of Emergency Situation:

Hazard category: Class 5.2 organic peroxides

Invasion route: Inhalation and ingestion

Health hazards: Irritating to eyes, skin, and mucous membranes. Thermal decomposition releases chlorine gas.

Environmental hazards: Harmful to the environment and can cause pollution to water bodies.

Explosive hazard: Explosive, this product is flammable and irritating.

GHS hazard category: Class 5.2 organic peroxides

Part 3 Ingredients/Composition Information

Harmful components: Di-(2,4-dichlorobenzoyl)peroxide-DCBP

content: 100

CAS NO: 133-14-2

Part 4 Emergency Measures

Skin contact: Remove contaminated clothing and rinse with plenty of running water.

Eye contact: Lift the eyelids and rinse with flowing water or saline solution. Seek medical attention.

Inhalation: Quickly leave the scene and move to a place with fresh air. Keep the respiratory tract unobstructed. If breathing is difficult, administer oxygen. If breathing stops, immediately perform artificial respiration. Seek medical attention.

Ingestion: Drink plenty of warm water and induce vomiting. Seek medical attention.

Part 5 Fire Protection Measures

Hazardous characteristics: Strong oxidizing agent. In a dry state, friction, vibration, and impact can cause explosions. Explosion occurs due to severe decomposition caused by heat. Contact with reducing agents, accelerators, organic compounds, combustibles, etc. can cause violent reactions and pose a risk of combustion and explosion

Harmful combustion products: carbon monoxide, carbon dioxide, hydrogen chloride.

Fire extinguishing method: Firefighters must wear gas masks and full body firefighting suits, and extinguish the fire in the upwind direction.

Extinguishing agent: fog water, foam, dry powder, carbon dioxide, sand.

Part 6 Emergency Response to Leakage

Emergency response: Isolate the contaminated area and restrict access. Cut off the fire source. It is recommended that emergency personnel wear dust masks and general work clothes. Do not come into direct contact with the leaked material. Minor leakage: Cover with dry sand, vermiculite, or other inert materials. Collect with a clean shovel in a sealed container. Massive leakage: Collect and recycle or transport to waste disposal sites for disposal.

Part 7 Handling and Storage

Precautions for operation: Closed operation, local exhaust. Prevent dust from being released into the workshop air. Operators must undergo specialized training and strictly adhere to operating procedures. It is recommended that operators wear self-priming filter dust masks, chemical safety goggles, rubber protective clothing, and rubber gloves. Keep away from sources of fire and heat, and smoking is strictly prohibited in the workplace. Use explosion-proof ventilation systems and equipment. Keep away from flammable and combustible materials. Avoid generating dust. Avoid contact with oxidants. Equip with corresponding types and quantities of fire-fighting equipment and emergency response equipment for leaks. Empty containers may contain residual harmful substances.

Storage precautions: Usually, products are added with stabilizers. Store in a ventilated and low-temperature warehouse. Stay away from sources of fire and heat. Protect from direct sunlight. The storage temperature should not exceed 30 °C. Sealed packaging. It should be stored separately from oxidants and flammable materials, and

avoid mixing storage. Not suitable for long-term storage to avoid spoilage. Equip with corresponding types and quantities of fire-fighting equipment. The storage area should be equipped with suitable materials to contain leaked materials. Vibration, impact, and friction are prohibited.

Part 8 Contact Control/Personal Protection

Engineering control: closed operation, local exhaust, or comprehensive exhaust

Respiratory protection: When the dust concentration in the air exceeds the standard, a self-priming filter dust mask must be worn. During emergency rescue or evacuation, air respirators should be worn.

Eye protection: Wear chemical safety goggles

Body protection: Wear adhesive protective clothing

Hand protection: Wear rubber gloves

Other protections: Smoking, eating, and drinking are prohibited in the workplace, and hands should be washed before meals. After work, take a shower and change clothes. Maintain good hygiene habits.

Part 9 Physical and Chemical Properties

Appearance and Characteristics: White to light yellow crystalline powder or flaky powder with a smooth texture.

Melting point: (°C) 55 ° C (dec.)

Relative density (water=1) 1.8

Boiling point: (°C) 487.2 ± 55.0 ° C at 760 mmHg

Molecular formula: C₁₄H₆Cl₂O₄

Relative molecular weight: 380

Main ingredient: Di (2,4-dichlorobenzoyl) peroxide

Theoretical active oxygen content (%): 4.21

Critical temperature (°C): Decomposition temperature/°C: 110 (half-life of 1 minute)

Flash point: 194.1 ± 30.5 ° C

Solubility: Insoluble in water, slightly soluble in ethanol, soluble in acetone, easily soluble in benzene and chloroform.

Main application: Suitable for mold free vulcanization of silicone rubber.

Part 10 Stability and Reactivity

Stability: Stable at room temperature and pressure

Prohibited substances: oxidants, flammable or combustible materials

Conditions to avoid contact: heat, light, friction, vibration

Aggregation hazard: Cannot occur

Decomposition products: Combustion decomposition products: carbon monoxide, carbon dioxide, hydrogen chloride.

Part 11 Toxicological Data

Acute toxicity: LD50: 225mg/kg (mouse abdominal cavity) LC50

Irritation: irritates the skin, eyes, and respiratory tract

Allergenicity: It has sensitization to the skin and respiratory tract

Part 12 Ecological Information

Ecological data: Harmful to the environment and can cause pollution to water.

Persistence and degradability: No data available

Potential bioaccumulation: No data available

Mobility in soil: no data available

Part 13 Disposal of Waste

Waste nature: hazardous waste

Waste disposal methods: It is recommended to use controlled incineration or safe burial methods for disposal. Damaged containers are prohibited from being reused and must be buried in designated locations.

Part 14 Transportation Information

UN number: 3102 3106

Packaging label: Organic peroxide

Dangerous Goods Number: 52048

Packaging category: II

Packaging method: Plastic bag or double-layer kraft paper bag with full or medium opening steel drum (steel plate thickness of 0.5mm, net weight of each drum not exceeding 50kg); Screw mouth glass bottles, plastic bottles, or plastic bags in ordinary wooden boxes.

Transportation precautions: Transportation: Plastic bags or double-layer kraft paper bags with full or medium openings on the outside, steel drums (steel plate thickness of 0.5mm, net weight not exceeding 50kg per drum), and flower boxes are added to the drums; Screw mouth glass bottles, plastic bottles, or plastic bags in ordinary wooden boxes.

During railway transportation, the dangerous goods loading table in the "Dangerous Goods Transport Rules" of the Ministry of Railways should be strictly followed for loading. When transported separately, ensure that the container does not leak, collapse, fall, or damage during transportation. Transport vehicles should be equipped with corresponding types and quantities of fire-fighting equipment during transportation. It is strictly prohibited to transport and mix with acids, flammable materials, organic substances, reducing agents, self igniting materials, and flammable materials when wet. The speed of the vehicle should be controlled to avoid bumps and vibrations. Transport in the morning and evening during summer to prevent exposure to sunlight. During road transportation, it is necessary to follow the prescribed route and it is prohibited to stay in residential areas and densely populated areas. Transport vehicles should be thoroughly cleaned and washed before and after loading and unloading, and it is strictly prohibited to mix impurities such as organic matter and flammable materials.

Part 15 Regulatory Information

Regulatory information: Regulations on the Safety Management of Hazardous Chemicals, Implementation Rules for the Regulations on the Safety Management of Hazardous Chemicals (Hua Lao Fa [1992] No. 677), Regulations on the Safe Use of Chemicals in the Workplace ([1996] Ministry of Labor Fa No. 423) and other regulations have made corresponding provisions for the safe use, production, storage, transportation, loading and unloading of hazardous chemicals; The classification and labeling of commonly used hazardous chemicals (GB 13690-92) classify this substance as Class 5.2 organic peroxide. Regulations on the Safety Management of Hazardous Chemicals, List of Hazardous Chemicals, Classification and Labeling of Commonly Used Hazardous Chemicals

Part 16 Other Information

reference:

1. Zhou Guotai, Complete Book of Chemical Hazardous Materials Safety Technology, Chemical Industry Press, 1997.
2. Co authored by the Toxic Chemicals Management Office of the National Environmental Protection Administration and the Beijing Research Institute of Chemical Industry, Environmental Data Manual for Chemical Toxicity Regulations, China Environmental Science Press, 1992
3. Canadian Centre for Occupational Health and Safety, CHEMINFO Database. 1998

4.Canadian Centre for Occupational Health and Safety, RTECS Database, 1989