

# Otto Chemie Pvt Ltd

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## DICUMYL PEROXIDE MSDS

### 1. Identification

Product Name **Dicumyl peroxide**

Cat No. : **D 1599**

CAS-No 80-43-3

Synonyms Bis(alpha, alpha-dimethylbenzyl)peroxide; DCP; Perkadox<sup>®</sup>4 BC

Recommended Use Laboratory chemicals. Uses advised against Not for food, drug, pesticide or biocidal product use

Details of the supplier of the safety data sheet

### 2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Organic peroxides

Type F

Skin Corrosion/Irritation

Category 2

Serious Eye Damage/Eye Irritation

Category 2

Label Elements

Signal Word

Warning

Hazard Statements

Heating may cause a fire

Causes skin irritation

Causes serious eye irritation

Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling

Wear protective gloves/protective clothing/eye protection/face protection

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Keep/Store away from clothing/ other combustible materials

Keep only in original container

Skin

IF ON SKIN: Wash with plenty of soap and water

If skin irritation occurs: Get medical advice/attention

Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing

If eye irritation persists: Get medical advice/attention

Storage

Protect from sunlight

Store away from other materials

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Toxic to aquatic life with long lasting effects

### 3. Composition/Information on Ingredients

Component	CAS-No	Weight %
Dicumyl peroxide	80-43-3	99

### 4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention. Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Obtain medical attention.

Inhalation Remove from exposure, lie down. Move to fresh air. If not breathing, give artificial

respiration. Obtain medical attention.

Ingestion Do not induce vomiting. Clean mouth with water. Get medical attention. Most important symptoms and effects

No information available. Notes to Physician Treat symptomatically

## 5. Fire-fighting measures

Suitable Extinguishing Media Water spray. Carbon dioxide (CO<sub>2</sub>). Dry chemical. Chemical foam. Unsuitable

Extinguishing Media No information available

Flash Point 110 °C / 230 °F

Method - No information available

Autoignition Temperature 380 °C / 716 °F

Explosion Limits

Upper No data available

Lower No data available

Oxidizing Properties Oxidizer

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Specific Hazards Arising from the Chemical

Oxidizer: Contact with combustible/organic material may cause fire. May ignite combustibles (wood paper, oil, clothing, etc.). Hazardous Combustion Products

Carbon monoxide (CO) Carbon dioxide (CO<sub>2</sub>)

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

NFPA

Health	Flammability	Instability	Physical hazards
2	1	1	N/A

## 6. Accidental release measures

Personal Precautions Use personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Ensure adequate ventilation. Environmental Precautions Do not flush into surface water or sanitary sewer system. Methods for Containment and Clean

Up Avoid dust formation. Remove all sources of ignition. Sweep up or vacuum up spillage and collect in suitable container for disposal.

## 7. Handling and storage

Handling Avoid contact with skin and eyes. Do not breathe dust. Avoid shock and friction. Keep away from clothing and other combustible materials. Storage Keep in a dry place. Keep container tightly closed. Do not store near combustible materials. Keep refrigerated.

## 8. Exposure controls / personal protection

Exposure Guidelines This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Engineering Measures Use explosion-proof electrical/ventilating/lighting/equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

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

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure. Respiratory

Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if

exposure limits are exceeded or if irritation or other symptoms are experienced. Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

## 9. Physical and chemical properties

Physical State Solid

Appearance White

Odor mint-like

Odor Threshold No information available

pH No information available

Melting Point/Range 38 - 41 °C / 100.4 - 105.8 °F  
 Boiling Point/Range No information available  
 Flash Point 110 °C / 230 °F  
 Evaporation Rate Not applicable  
 Flammability (solid,gas) No information available  
 Flammability or explosive limits  
 Upper No data available  
 Lower No data available  
 Vapor Pressure No information available  
 Vapor Density Not applicable  
 Specific Gravity 1.02 @ 45°C  
 Solubility insoluble  
 Partition coefficient; n-octanol/water No data available  
 Autoignition Temperature 380 °C / 716 °F  
 Decomposition Temperature No information available  
 Viscosity Not applicable  
 Molecular Formula C18 H22 O2  
 Molecular Weight 270.37

### 10. Stability and reactivity

Reactive Hazard Yes  
 Stability Oxidizer: Contact with combustible/organic material may cause fire. Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition. Incompatible products. Combustible material. Excess heat.  
 Incompatible Materials Acids, Bases, Metals, Reducing agents, Strong reducing agents, Combustible material  
 Hazardous Decomposition Products Carbon monoxide (CO), Carbon dioxide (CO2)  
 Hazardous Polymerization Hazardous polymerization does not occur. Hazardous Reactions None under normal processing.

### 11. Toxicological information

Acute Toxicity  
 Product Information  
 Component Information  

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Dicumyl peroxide	LD50 = 4100 mg/kg ( Rat )	Not listed	Not listed

 Toxicologically Synergistic Products  
 No information available  
 Delayed and immediate effects as well as chronic effects from short and long-term exposure  
 Irritation No information available  
 Sensitization No information available  
 Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.  

Component	CAS-No	IARC	NTP	ACGIH	OSHA	Mexico
Dicumyl peroxide	80-43-3	Not listed	Not listed	Not listed	Not listed	Not listed

 Mutagenic Effects Not mutagenic in AMES Test  
 Reproductive Effects No information available. Developmental Effects No information available. Teratogenicity No information available. STOT - single exposure None known  
 STOT - repeated exposure None known  
 Aspiration hazard No information available  
 Symptoms / effects,both acute and Delayed No information available  
 Endocrine Disruptor Information No information available  
 Other Adverse Effects The toxicological properties have not been fully investigated.

### 12. Ecological information

Ecotoxicity  
 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. The product contains following substances which are hazardous for the environment.

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Dicumyl peroxide	Not listed	LC50: = 15.6 mg/L, 96h (Pimephales promelas) LC50: 80.51 - 146.07 mg/L, 96h semi-static (Poecilia	Not listed	Not listed

reticulata)  
Persistence and Degradability Insoluble in water Persistence is unlikely  
Bioaccumulation/ Accumulation No information available. Mobility . Is not likely mobile in the environment due its low water solubility.  
Component log Pow  
Dicumyl peroxide 3.78

### 13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

DOT  
UN-No UN3011  
Proper Shipping Name ORGANIC PEROXIDE TYPE F, SOLID  
Proper technical name DICUMYL PEROXIDE  
Hazard Class 5.2  
Packing Group II  
TDG  
UN-No UN3110  
Proper Shipping Name ORGANIC PEROXIDE TYPE F, SOLID  
Hazard Class 5.2  
Packing Group II  
IATA  
UN-No UN3110  
Proper Shipping Name ORGANIC PEROXIDE TYPE F, SOLID  
Hazard Class 5.2  
IMDG/IMO  
UN-No UN3110  
Proper Shipping Name ORGANIC PEROXIDE TYPE F, SOLID  
Hazard Class 5.2

### 15. Regulatory information

International Inventories  
Component TSCA DSL NDSL EINECS ELINCS NLP PICCS ENCS AICS IECSC KECL  
Dicumyl peroxide X X - 201-279-3 - X X X X X  
Legend:  
X - Listed  
E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.  
F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.  
N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.  
P - Indicates a commenced PMN substance  
R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.  
S - Indicates a substance that is identified in a proposed or final Significant New Use Rule  
T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.  
XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base  
Production and Site Reports (40 CFR 710(B)).  
Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.  
Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.  
U.S. Federal Regulations  
TSCA 12(b) Not applicable  
SARA 313 Not applicable  
SARA 311/312 Hazard Categories See section 2 for more information  
CWA (Clean Water Act) Not applicable  
Clean Air Act Not applicable  
OSHA Occupational Safety and Health Administration

Not applicable  
CERCLA Not applicable  
California Proposition 65 This product does not contain any Proposition 65 chemicals  
U.S. State Right-to-Know  
Regulations  
Not applicable  
U.S. Department of Transportation  
Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N  
U.S. Department of Homeland Security  
This product does not contain any DHS chemicals. Other International Regulations  
Mexico - Grade No information available

## **16. Other information**

### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text