

1 Identification of the substance/mixture and of the company/undertaking

- 1.1 Product identifier
 - PEROXAN DC**
- Trade name:
- CAS Number: 80-43-3
- EC number: 201-279-3
- 1.2 Relevant identified uses of the substance or mixture and uses advised against
 - No further relevant information available.
- Application of the substance / the mixture
 - Reaction initiator
 - For industrial use
- 1.3 Details of the supplier of the safety data sheet
 - Manufacturer/Supplier: Pergan Marshall LLC
 - 710 Bussey Road
 - Marshall TX 75670
 - 903-934-7763
- Further information obtainable from:
 - 903-934-7763 or 877-2-Pergan (877-273-7426)
 - customerservice@pergan.com
- 1.4 Emergency telephone number:
 - CHEMTREC (24 hours) 800-424-9300
 - Pergan Marshall LLC 903-938-5141

DISTRIBUTED BY: R.E. CARROLL, INC.
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F: 609-695-0102 Orders@RECarroll.com

2 Hazards identification

- 2.1 Classification of the substance or mixture
 - Organic Peroxide - Type F H242 Heating may cause a fire.
 - Aquatic Toxicity, Chronic - 2 H411 Toxic to aquatic life with long lasting effects.
 - Skin Irritant - 2 H315 Causes skin irritation.
 - Eye Irritant - 2 H319 Causes serious eye irritation.
- GHS Classification Scale (1 = severe hazard; 4 = slight hazard)

- 2.2 Label elements
- Hazard symbols



- Signal word: Warning
- Hazard-determining components of labelling:
- Hazard statements:
 - Dicumyl peroxide
 - H242 Heating may cause a fire.
 - H315 Causes skin irritation.
 - H319 Causes serious eye irritation.
 - H411 Toxic to aquatic life with long lasting effects.
- Precautionary statements:
 - P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
 - P220 Keep away from dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy metal compounds and amines).
 - P234 Keep only in original container.
 - P264 Wash thoroughly after handling.
 - P273 Avoid release to the environment.
 - P280 Wear protective gloves/protective clothing/eye protection/face protection.
 - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 - P410 Protect from sunlight.
 - P411+P235 Store at temperatures not exceeding +30°C (86°F). Keep cool.
 - P420 Do not mix with peroxide-accelerators or reducing agents.
 - P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

(Contd. on page 2)

Trade name: **PEROXAN DC**

3 Composition/information on ingredients

3.1 Chemical characterization: Substances

- CAS No. Description 80-43-3 Dicumyl peroxide
- Identification number(s)
- EC number: 201-279-3

4 First aid measures

4.1 Description of first aid measures

- **After inhalation:** Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur. In case of unconsciousness, place patient stably in side position for transportation.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly. Immediately remove contaminated clothing. If irritation persists or if contact has been prolonged, obtain medical attention.
- **After eye contact:** Rinse opened eye for at least 15 minutes under running water. Get medical attention.
- **After swallowing:** Obtain medical attention. If patient is fully conscious, rinse mouth with water. Give water to drink in small sips. (diluting effect) Never give anything by mouth to an unconscious person. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Firefighting measures

5.1 Extinguishing media

- **Suitable extinguishing agents:** CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

5.2 Special hazards arising from the substance or mixture

Under certain fire conditions, traces of other toxic gases cannot be excluded. Hydrocarbons, carbon dioxide and -monoxide.

5.3 Advice for firefighters

- **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **Additional information:** Cool endangered receptacles with water spray. Self-protection first!

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from ignition sources.
 In case of further temperature, cool with water spray from a safe distance.
 Wear breathing apparatus during decomposition of materials.
 Wear protective equipment. Keep unprotected persons away.

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.
 Large quantities should be diluted with suitable desensitization agent to a concentration below 10% before disposal.
 Pick up mechanically. Collect in suitable container and dispose of in accordance with government regulations.
 In case of large spillage, the environmental authority should be informed.

Trade name: **PEROXAN DC**

7 Handling and storage

· 7.1 Precautions for safe handling

Keep receptacles tightly sealed.
 Store in cool, dry place in tightly closed receptacles.
 Keep away from heat and direct sunlight.
 Open and handle receptacle with care.
 Prevent formation of dust.
 Wear suitable respiratory protective device when decanting larger quantities without extractor facilities.
 Do not refill residue into storage receptacles.
 Restrict the quantity stored at the work place.
 Before break and at the end of work hands should be thoroughly washed.
 Only use tools made of suitable materials (e. g. polyethylene or stainless steel).
 Keep away from dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy-metal compounds and amines).
 Oxidizing because of releasing oxygen.
 While using do not eat, drink or smoke.
 Do not generate flames or sparks.
 Keep product and emptied container away from heat and sources of ignition.
 Avoid shock and friction.
 Take precautionary measures against static discharges.
 Do not smoke.

· Information about fire and explosion protection:

Protect from heat.
 Protect against electrostatic charges.
 Prevent impact and friction.
 Use explosion-proof apparatus / fittings and spark-proof tools.
 Dust can combine with air to form an explosive mixture.
 Substance/product is oxidizing when dry.
 Product is not explosive. However, formation of explosive air/dust-mixtures is possible.
 Avoid open flames, sparks, direct sunlight and other sources of ignition.
 Keep ignition sources away – Do not smoke.

· 7.2 Conditions for safe storage, including any incompatibilities

· **Storage:** Pay attention to the special requirements of your local authorities for storing dangerous goods.

· Requirements to be met by storerooms and receptacles:

Store in a cool location.
 Store only in the original receptacle.
 Prevent any seepage into the ground.
 Use only receptacles specifically permitted for this substance/product.

· Information about storage in one common storage facility:

Do not store or park organic peroxide together with heavy metal compounds and amines.
 Store away from foodstuffs, drinks and feeding stuffs.

· Further information about storage conditions:

Keep container tightly sealed.
 Store in cool, dry conditions in well sealed receptacles.
 Protect from heat and direct sunlight.
 Protect from contamination.
 Store in a cool location.

· Recommended storage temperature (To maintain quality):

max.: +30 °C (86°F)

· Storage class:

5.2

· 7.3 Specific end use(s)

No further relevant information available.

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Trade name: **PEROXAN DC**

8 Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients with limit values that require monitoring at the workplace:** Not required.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals. Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid close or long term contact with the skin. Avoid contact with the eyes and skin. Do not eat, drink, smoke or sniff while working. Be sure to clean skin thoroughly after work and before breaks.
- **Respiratory protection:** Not necessary if room is well-ventilated. Use suitable respiratory device when insufficiently ventilated.
- **Protection of hands:** Use chemical-protective gloves.
- **Material of gloves** Butyl rubber, BR
Fluorocarbon rubber (Viton)
Nitrile rubber, NBR
Neoprene
- **Eye protection:** Wear suitable eye protection: face shield, safety goggles. Contact lenses should not be worn.
- **Body protection:** Protective work clothing

9 Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**
- **General Information**
- **Appearance:**
- **Form:** Crystalline
- **Color:** White
- **Odor:** Weak, characteristic
- **Change in condition**
- **Melting point/Melting range:** 35 - 45 °C
- **Boiling point/Boiling range:** Not applicable.
- **Flash point:** Not applicable.
- **Flammability (solid, gaseous):** May cause fire.
- **Decomposition temperature:** +80 °C (176° F) (SADT)
- **Danger of explosion:** Product is not explosive. However, formation of explosive air/dust mixtures is possible.
- **Density at 20 °C:** 1.10 g/cm³
- **Solubility in / Miscibility with water:** Insoluble.
- **Partition coefficient (n-octanol/water):** not determined
- **9.2 Other information** No further relevant information available.
- **Active oxygen** > 5.8 %

(Contd. on page 5)

Trade name: **PEROXAN DC**

10 Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** SADT (Self Accelerating Decomposition Temperature) is the lowest temperature at which self accelerating decomposition may occur with substance in the packaging as used in transport. A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can cause decomposition at and above the temperature. Contact with incompatible substances can cause decomposition at or below the SADT.
No decomposition if used and stored according to specifications.
To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions** Self-accelerating decomposition at SADT.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** Rapid decomposition by dirt, rust, chemicals in particular concentrated acids, alkalis and accelerators (e. g. heavy-metal compounds and amines).
- **10.6 Hazardous decomposition products:** Hydrocarbons, carbon dioxide and -monoxide.
No hazardous decomposition products if used and stored according to specifications.
- **Additional information:** Emergency procedures will vary depending on conditions. The customer should have an emergency response plan in place.

11 Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:** Based on available data, the classification criteria are not met.
- **LD/LC50 values relevant for classification:**

80-43-3 dicumyl peroxide		
Oral	LD50	>2000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritating effect.
Causes skin irritation.
- **Serious eye damage/irritation** Irritating effect.
Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

12 Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:**

80-43-3 dicumyl peroxide		
EC50		>1000 mg/l (activa sludge)
EC50 / 72h		>20 mg/l (alga)

- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.
- **Ecotoxicological effects:**
- **Remark:** Toxic for fish
- **Additional ecological information:**
- **General notes:** Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.
Also poisonous for fish and plankton in water bodies.
Toxic for aquatic organisms.
- **12.5 Other adverse effects** No further relevant information available.

Trade name: **PEROXAN DC**

13 Disposal considerations

- 13.1 Waste treatment methods

- Recommendation

After diluting with a suitable inert solid material to 10%, the product must be supplied to a special treatment (e. g. thermal utilization). Dispose of waste material in compliance with all federal, state and local regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- Contaminated packaging:

- Recommendation

Dispose according to local regulations. Emptied container might retain product residues. Follow all warnings even after container is emptied. Do not shred containers before they are thoroughly cleaned from product residues. Do not wash residues into drains or other waterways.

14 Transport information

- 14.1 UN-Number

UN3110

- 14.2 Proper shipping name

- US Department of Transportation (DOT)

ORGANIC PEROXIDE TYPE F, SOLID (DICUMYL PEROXIDE, > 52-100%)

- International Maritime Dangerous Goods Code (IMDG)

ORGANIC PEROXIDE TYPE F, SOLID (DICUMYL PEROXIDE, > 52-100%), MARINE POLLUTANT

- 14.3 Transport hazard class(es)

- DOT



- IMDG



- Class

5.2 Organic peroxides.

- Label

5.2

- 14.4 Packing group

- DOT

II

- 14.5 Environmental hazards:

- Marine pollutant:

Product contains environmentally hazardous substances: DICUMYL PEROXIDE

Yes

Symbol (fish and tree)

- 14.6 Special precautions for user

Warning: Organic peroxides.

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Trade name: **PEROXAN DC**

15 Regulatory information

· Chemical Inventory Status

The ingredients of this product are on the following chemical inventory lists.

US. Toxic Substances Control Act	TSCA
EU. European Inventory of Existing Chemical Substances	EINECS
Canada. Domestic Substances List	DSL
Japan. Kashin-Hou Laws List	ENCS
Korea. Existing Chemicals Inventory	KECI
China. Inventory of Existing Chemical Substances	IECSC
Taiwan. National Existing Chemical Inventory	NECI
New Zealand Inventory of Chemicals	NZIoC
Australian Inventory of Chemical Substances	AICS
Philippine Inventory of Chemicals and Chemical Substances	PICCS

· United States – Federal Regulations

SARA Title III – Section 313 Toxic Chemicals:

This product does not contain any chemical compounds with known CAS numbers that exceed the threshold (de minimis) reporting levels established by SARA Title III, Section 313.

· United States – State Regulations

New Jersey Right to Know

Chemical Name	CAS Number	New Jersey TS Number
Dicumyl peroxide	80-43-3	-

16 Other information

Disclaimer: This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Hazards ratings: 0 = no hazard, 1 = slight, 2 = moderate, 3 = high, 4 = extreme

	Health	Fire	Reactivity Physical Hazard
NFPA	1	1	1
HMIS	1	1	1

REVISION HISTORY

Version 2 - 11.1/12.1 toxicity data changed

Version 3 - formatting change