

Perkadox PD-50S-ps-a

SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME

Perkadox PD-50S-ps-a

CHEMICAL NAME

2,4-Dichlorobenzoyl peroxide in
silicone oil

SYNONYM

Peroxide, bis(2,4-dichlorobenzoyl) in
Silicone oil

CHEMICAL FORMULA

Mixture

CAS #

MIXTURE

CHEMICAL FAMILY

Organic peroxides/diacyl peroxides

MANUFACTURERS NAME

Akzo Nobel Chemicals Inc.

PRODUCT/TECHNICAL INFORMATION

1-800-828-7929

ADDRESS

300 South Riverside Plaza
Chicago, IL 60606

MEDICAL/HANDLING EMERGENCY

1-914-693-6946

COUNTRY

USA

TRANSPORTATION EMERGENCY

CHEMTREC 1-800-424-9300

PRODUCT USE

Rubber production

REVISION DATE

9/23/1998

ISSUE DATE

2/15/1996

REVISION NO.

003

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE DESCRIPTION

PERCENT

CAS#

Di-2,4-dichlorobenzoyl peroxide
Polydimethylsiloxane
Water

** 50.000
48.000
2.000

133-14-2
63148-62-9
7732-18-5

** SUBSTANCE IS A COMPOUND AND/OR MIXTURE

SECTION 3. HAZARDS IDENTIFICATION

Appearance & Odor

Thick, white paste with a slight odor.

STATEMENT OF HAZARDS

DANGER!

ORGANIC PEROXIDE.

HEAT OR CONTAMINATION MAY CAUSE HAZARDOUS DECOMPOSITION.

MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

Fire & Explosion Hazards

Peroxides and peroxide decomposition products are flammable and
can ignite with explosive force if confined.

Primary Route of Exposure

Skin or eye contact and inhalation of vapor or mists are the
principal routes of exposure to this product.

Inhalation Acute Exposure

Inhalation of dust may cause mild irritation.

MARKETED BY

HARWICK STANDARD
DISTRIBUTION CORPORATION
60 S. Seiberling Street • Akron, Ohio 44305

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SECTION 3. HAZARDS IDENTIFICATION
(CONTINUED)

Skin Contact - ACUTE

Skin contact may cause moderate irritation.

Eye contact - ACUTE

Eye contact may cause mild irritation.

Ingestion - ACUTE

If swallowed, this product may cause irritation of the mouth, throat and stomach.

CARCINOGENICITY

IARCNO	OSHANO
NTPNO	ACGIHNO

SECTION 4. FIRST AID MEASURES

Inhalation First Aid

Remove to fresh air. If breathing becomes difficult, oxygen may be given, preferably with a physician's advice. If not breathing, give artificial respiration. Get medical attention.

Skin Contact - First Aid

Immediately remove contaminated clothing and shoes. Wash skin with soap and plenty of water for at least 15 minutes. Do not attempt to neutralize with chemical agents. Get medical attention. Wash contaminated clothing before reuse. Thoroughly clean or destroy contaminated shoes.

Eye Contact - First Aid

Immediately flush eyes with large quantities of running water for a minimum of 15 minutes. If the victim is wearing contact lenses, remove them. Take care not to contaminate the victim's healthy skin and eyes. Hold the eyelids apart during the flushing to ensure rinsing of the entire surface of the eye and lids. DO NOT let victim rub eye(s). Do not attempt to neutralize with chemical agents. Get medical attention immediately. Oils or ointments should not be used at this time. Continue flushing for an additional 15 minutes if a physician is not immediately available.

Ingestion - First Aid

Immediately give several glasses of water. DO NOT induce vomiting. If vomiting occurs, keep head below hips to reduce the risk of aspiration. Give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Never give anything by mouth to a person who is unconscious or convulsing.

If victim is unconscious, monitor pulse, breathing and airway. If breathing stops, begin artificial respiration immediately. If the heart has stopped, give cardiopulmonary resuscitation (CPR). Get medical attention immediately.

Medical conditions aggravated

Persons with pre-existing skin disease may be at an increased risk if exposed dermally to this material.

Note to Physician

No specific antidote is known. Based on the individual reactions of the patient, the physician's judgement should be used to control symptoms and clinical conditions.

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SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT
N/D F N/D C

FLASH METHOD
N/A

AUTO IGNITION TEMPERATURE
N/D F N/D C

UPPER EXPLOSION LIMIT
N/D

LOWER EXPLOSION LIMIT
N/D

Extinguishing Media

Use water fog, dry chemical, carbon dioxide, or foam extinguishing agents.

Extinguish large fires with large amounts of water spray, fog or foam from a safe/protected position.

Fire Fighting Procedures

As in any fire, prevent human exposure to fire, smoke, fumes or products of combustion. Evacuate non-essential personnel from the fire area. Firefighters should wear full-face, self-contained breathing apparatus and impervious protective clothing. If possible, move containers from the fire area. If not leaking, keep fire exposed containers cool with a water fog or spray to prevent rupture due to excessive heat. High pressure water may spread product from broken containers increasing contamination or fire hazard.

Dike fire control water for later disposal. Do not allow contaminated water to enter waterways.

Fire & Explosion Hazards

Peroxides and peroxide decomposition products are flammable and can ignite with explosive force if confined.

Other Fire + Explosion Hazards

This product can produce flammable vapors which may travel to a source of ignition and flash back.

Hazardous Products/Combustion

Thermal decomposition produces oxides of carbon and/or hazardous fumes, vapors and/or gasses including polychlorinated biphenyls (PCB) (2,2',4,4'-tetrachlorobiphenyl).

NFPA HEALTH RATING
2

NFPA FLAMMABILITY RATING
2

NFPA REACTIVITY RATING
2

NFPA OTHER

SECTION 6. ACCIDENTAL RELEASE MEASURES

Cleanup

Remove all sources of ignition from the spill area. Stop source of spill. If tools are needed, they should be non-sparking. Dike area to prevent spill from spreading.

Evacuate all non-essential personnel upwind. Any person entering an area of a significant spill or of an unknown concentration of a gas or a vapor should use a NIOSH-approved, positive-pressure/pressure-demand, self-contained breathing apparatus. Protective equipment to prevent skin and eye contact should be worn.

Soak up spilled material with a suitable absorbent such as clay, sand or earth. Sweep up absorbed material and place in a chemical waste container for disposal.

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SECTION 7. HANDLING AND STORAGE

Handling

Containers should be located in an area where they can be rotated regularly (first in, first out) and visually inspected for damage or bulging on a regular basis.

Use approved equipment for transport of containers to avoid puncturing or rupturing containers. Do not use air pressure to empty containers.

Protective equipment should be worn when handling this product to avoid eye and skin contact.

Emptied container may retain product residues. Follow all warnings and precautions even after container is emptied.

Storage

To insure product quality, storage temperatures should not exceed 86 F (30 C).

To insure against possible exothermic self-accelerating decomposition, storage temperatures must not exceed 122 F (50 C). This emergency temperature is derived from the SADT (see Sect. 9). Keep containers tightly closed. Store away from reducing agents and accelerators.

MAXIMUM STORAGE TEMPERATURE

86.00 F 30.00 C

General Comments

Containers should not be opened until ready for use. Use clean non-sparking equipment and tools when handling.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory protection

Use a NIOSH-approved organic vapor respirator with dust, mist and fume filters to reduce potential for inhalation exposure if use conditions generate vapor, mist or aerosol and adequate ventilation (e.g., outdoor or well-ventilated area) is not available. Where exposure potential necessitates a higher level of protection, use a NIOSH-approved, positive-pressure/pressure-demand, air-supplied respirator.

When using respirator cartridges or canisters, they must be changed frequently (following each use or at the end of the workshift) to assure breakthrough exposure does not occur.

Skin Protection

Skin contact with this product should be prevented through the use of suitable protective clothing, gloves, and footwear selected with regard for use condition exposure potential.

Eye Protection

Because eye contact with this product may cause irritation, chemical goggles and/or a face shield should be worn when handling this product.

Ventilation protection

Local exhaust ventilation, enclosed system design, continuous monitoring devices, process isolation and remote control are traditional exposure control techniques which may be used to effectively minimize employee exposure.

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**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
 (CONTINUED)**

Other Protection

Safety showers, with quick opening valves which stay open, and eye wash fountains, or other means of washing the eyes with a gentle flow of cool to tepid tap water, should be readily available in all areas where this material is handled or stored. Water should be supplied through insulated and heat-traced lines to prevent freeze-ups in cold weather.

APPLICABLE EXPOSURE LIMITS

Available exposure limits applicable to this product are shown below.

**EXPOSURE LIMITS/REGULATORY INFORMATION
 (IN MG/M3)**

SUBSTANCE DESCRIPTION	REG. AGCY	PEL	TLV	TWA	STEL	CEIL
Di-2,4-dichlorobenzoyl peroxide	OSHA	N/D	N/D	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D	N/D	N/D
	NIOSH	N/D	N/D	N/D	N/D	N/D
	SUPPLIER	N/D	N/D	N/D	N/D	N/D
Polydimethylsiloxane	OSHA	N/D	N/D	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D	N/D	N/D
	NIOSH	N/D	N/D	N/D	N/D	N/D
	SUPPLIER	N/D	N/D	N/D	N/D	N/D
Water	OSHA	N/D	N/D	N/D	N/D	N/D
	ACGIH	N/D	N/D	N/D	N/D	N/D
	NIOSH	N/D	N/D	N/D	N/D	N/D
	SUPPLIER	N/D	N/D	N/D	N/D	N/D

LEGEND:

EXPOSURE LIMIT DESCRIPTIONS

- CEIL Ceiling Exposure Limit
- PEL Permissible Exposure Limit
- STEL Short Term Exposure Limit
- TLV Threshold Limit Value
- TWA Time Weighted Average
- N/D = Not Determined

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

VAPOR PRESSURE (mm Hg)
 N/D

VAPOR DENSITY (Air = 1.0)
 N/D

EVAPORATION RATE
 N/D

VOLATILE %
 N/D

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SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES
(CONTINUED)

BOILING POINT
N/D F N/D C

ODOR THRESHOLD (ppm)
N/D

SPECIFIC GRAVITY
AP 1.25 @ 25 deg C (77 deg F)

BULK DENSITY
N/D

SOLUBILITY IN WATER
N/D Insoluble

SOLUBILITY IN OTHER SOLVENTS

COEFFICIENT OF OIL/WATER
N/D

POUR POINT
N/D F N/D C

MELTING POINT
N/D F N/D C

pH FACTOR
N/D

CLOUD POINT
N/D F N/D C

FLASH POINT
N/D F N/D C

FLASH METHOD
N/A

UPPER EXPLOSION LIMIT
N/D

LOWER EXPLOSION LIMIT
N/D

AUTO IGNITION TEMPERATURE
N/D F N/D C

Other
SADT => 131 F (=> 55 C) (see Sect.10)

SECTION 10. STABILITY AND REACTIVITY

Stability

This product is stable at ambient temperatures but may decompose if exposed to temperatures above 122 F (50 C).

Incompatibilities

This product is incompatible with strong acids, strong alkalis, reducing agents and accelerators.

Polymerization

Hazardous polymerization will not occur.

Decomposition

Thermal decomposition will produce oxides of carbon and can produce flammable and/or combustible vapors and gases including polychlorinated biphenyls (PCB) (2,2',4,4' tetrachlorobiphenyl).

Conditions to Avoid

The SADT for this product is => 131 F (=> 55 C).
The SADT (self-accelerating decomposition temperature) is an experimentally derived temperature at which a typical package of the product will undergo self-accelerating decomposition. Decomposition can be expected to be hazardous and uncontrollable.
Under no circumstances should this product be exposed to temperatures near or above the emergency temperature of 122 F (50 C). Such an exposure could initiate hazardous decomposition.
Contact with incompatible materials such as acids, alkalis, heavy metals and reducing agents will also result in hazardous decomposition.

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SECTION 11. TOXICOLOGICAL INFORMATION

Toxicological - Inhalation

Inhalation toxicity is not available for this product.

Inhalation Chronic Exposure

Prolonged and/or repeated inhalation may cause respiratory tract irritation.

Toxicological - Dermal

Dermal toxicity data for this product is not available. However, when 2,4-dichlorobenzoyl peroxide was tested as a 50% solution in silicone fluid, the LD50 (rabbits) was > 8000 mg/kg.

Skin Contact - CHRONIC

Prolonged or repeated skin contact may cause irritation with redness.

Toxicological - Eye

Eye toxicity data is not available for this product. However, 2,4-dichlorobenzoyl peroxide was a slight eye irritant when tested (rabbits) as a 50% solution in silicone fluid.

Toxicological - Ingestion

Ingestion toxicity data is not available for this product. However, the following information is available.

The LD50 (rats) for a 50% solution of 2,4-dichlorobenzoyl peroxide in silicone fluid was > 12918 mg/kg.

Ingestion - CHRONIC

Chronic ingestion effects of this product are not known.

CARCINOGENICITY/MUTAGENICITY

The carcinogenic/mutagenic properties of this product are not known.

REPRODUCTIVE EFFECTS

The reproductive toxicity of this product is not known.

NEUROTOXICITY

The neurotoxic effects of this product are not known.

Other Toxicological Effects

No other toxic effects for this product are known.

Target Organs

Overexposure to this product may affect the skin, eyes and respiratory system.

SECTION 12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

The ecological toxicity of this product is not known.

DISTRIBUTION

Other ecological information on this product is not known.

CHEMICAL FATE

Chemical fate information on this product is not known.

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SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal

The characteristic of reactivity per RCRA would be exhibited by the unused product if it becomes a waste material.

CONTAINER DISPOSAL

Containers should be drained of residual product before disposal. Empty containers should be disposed of in accordance with all applicable laws and regulations.

SECTION 14. TRANSPORT INFORMATION

SHIPPING DESCRIPTION

ORGANIC PEROXIDE TYPE D, SOLID
(DI-2,4-DICHLOROBENZOYL PEROXIDE, 50%)
5.2, UN3106, PG II
NORTH AMERICAN ERG NO: 145

REQUIRED LABELS

ORGANIC PEROXIDE.

ENVIRON. HAZARDOUS SUBSTANCE

This product does not contain an environmentally hazardous substance per 49 CFR 172.101, Appendix A.

SECTION 15. REGULATORY INFORMATION

Component Di-2,4-dichlorobenzoyl peroxide is subject to the following

Environmental List

DSL	Domestic Substance List-Canada
NJ R-T-K	New Jersey R-T-K Hazard. Sub.
TSCA	Toxic Subst. Cont. Act -listed

Component Polydimethylsiloxane is subject to the following

Environmental List

DSL	Domestic Substance List-Canada
TSCA	Toxic Subst. Cont. Act -listed

Component Water is subject to the following

Environmental List

DSL	Domestic Substance List-Canada
TSCA	Toxic Subst. Cont. Act -listed

Akzo Nobel Chemicals Inc.
MATERIAL SAFETY DATA SHEET

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SECTION 15. REGULATORY INFORMATION
(CONTINUED)

OTHER REGULATORY INFORMATION

No other regulatory information is available on this product.

WHMIS HAZARD CLASS
C, D-2B, F

HAZARD RATING SOURCE
HMIS

HEALTH
3

REACTIVITY
1

FLAMMABILITY
2

OTHER

SECTION 16. OTHER INFORMATION

OTHER INFORMATION

PERKADOX is a registered trademark of Akzo Nobel Chemicals Inc.

CREATED BY

Product Safety 914/694-5000

KEY TO ABBREVIATIONS:

EQ=Equal

LT=Less Than

GT=Greater Than

AP=Approximately

TR=Trace

ND=No Data available

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