



# Perkadox PD-50S-ps-a

## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

<b>Product name</b> Perkadox PD-50S-ps-a	<b>Chemical description</b> 2,4-Dichlorobenzoyl peroxide in silicone oil
<b>Synonym</b> Peroxide, bis(2,4-dichlorobenzoyl) in Silicone oil	<b>Chemical formula</b> MIXTURE
<b>CAS-number</b> MIXTURE	<b>Chemical family</b> Organic Peroxides/Diacyl peroxides
<b>Supplier</b> Akzo Nobel Polymer Chemicals LLC 300 South Riverside Plaza Chicago, IL 60606 USA	
<b>Emergency telephone</b> + 1-914-693-6946 Dobbs Ferry, NY USA	<b>Transportation Emergency</b> CHEMTREC - USA: 1-800-424-9300 CANUTEC - CANADA: 1-613-996-6666
<b>Product use</b> Rubber production	<b>Product/technical Information</b> 1-800-828-7929
<b>Date of first issue</b> 02-15-1996	<b>Date of last issue / Revision #</b> 09-23-1998 / 3.00

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	Percentage(s)	CAS number
Di-2,4-dichlorobenzoyl peroxide	50.00	133-14-2
Polydimethylsiloxane	48.00	63148-62-9
Water	2.00	7732-18-5

## 3. HAZARDS IDENTIFICATION

<p><b>Emergency overview</b> Thick, white paste with a slight odor. DANGER! ORGANIC PEROXIDE. HEAT OR CONTAMINATION MAY CAUSE HAZARDOUS DECOMPOSITION. MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION. Peroxides and peroxide decomposition products are flammable and can ignite with explosive force if confined.</p>
<p><b>Health effects</b> Skin or eye contact and inhalation of vapor or mists are the principal routes of exposure to this product. Inhalation of dust may cause mild irritation. Skin contact may cause moderate irritation. Eye contact may cause mild irritation. If swallowed, this product may cause irritation of the mouth, throat and stomach.</p>

Carcinogenicity	
Description	Applicable
IARC	no
NTP	no
OSHA	no

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



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ACGIH	no
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### 4. FIRST AID MEASURES

<p><b>Inhalation</b> 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.</p>
<p><b>Skin</b> 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.</p>
<p><b>Eye</b> 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.</p>
<p><b>Ingestion</b> 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.</p>
<p><b>Note to physician</b> Persons with pre-existing skin disease may be at an increased risk if exposed dermally to this material.  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.</p>

### 5. FIRE-FIGHTING MEASURES

<p><b>Flash point</b> not determined</p>	<p><b>Autoignition temperature</b> not determined</p>
<p><b>Flash Method</b> N/A</p>	<p><b>Explosion limits</b> lower: N/D upper: N/D</p>
<p><b>Extinguishing media</b> 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.</p>	
<p><b>Fire fighting procedures</b> 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.</p>	
<p><b>Fire and explosion hazards</b> Peroxides and peroxide decomposition products are flammable and can ignite with explosive force if confined. This product can produce flammable vapors which may travel to a source of ignition and flash back.</p>	

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### Hazardous products of 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 ratings

Hazard	Rating
Health	2
Flammability	2
Reactivity	2
Other	

## 6. ACCIDENTAL RELEASE MEASURES

### Methods for cleaning up

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.

## 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.

## 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.



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<p><b>Skin protection</b> 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.</p>
<p><b>Eye protection</b> Because eye contact with this product may cause irritation, chemical goggles and/or a face shield should be worn when handling this product.</p>
<p><b>Ventilation protection</b> 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.</p>
<p><b>Other information</b> 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 freezeups in cold weather.</p>
<p><b>Applicable exposure limits</b> Available exposure limits applicable to this product are shown below.</p>

Agency	Value/Unit of measurement
<p>PEL = Permissible Exposure Limit TLV = Threshold Limit Value TWA = Time Weighted Average STEL = Short Term Exposure Limit CEIL = Ceiling Exposure Limit REL = Recommended Exposure Limit WEEL = Workplace Environmental Exposure Limit IDLH = Immediate Dangerous to Life and Health</p>	

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<p><b>Appearance and Odour</b> Thick, white paste with a slight odor.</p>	<p><b>pH value</b> not determined</p>
<p><b>Odor threshold (ppm)</b> not determined</p>	<p><b>Relative vapour density (air=1)</b> N/D</p>
<p><b>Volatile %</b> N/D</p>	<p><b>Vapour pressure (mm Hg)</b> not determined</p>
<p><b>Boiling point/range</b> not determined</p>	<p><b>Evaporation rate</b> not determined</p>
<p><b>Melting point/range</b> not determined</p>	
<p><b>Cloud point</b> N/D</p>	<p><b>Pour point</b> not determined</p>
<p><b>Flash point</b> not determined</p>	<p><b>Solubility in water</b> Insoluble</p>
<p><b>Flash method</b> N/A</p>	<p><b>Solubility in other solvents</b> not determined</p>
<p><b>Autoignition temperature</b> not determined</p>	
<p><b>Density</b> approx. 1.25 @ 25 deg C (77 deg F)</p>	<p><b>Partition coefficient n-octanol/water</b> not determined</p>

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<b>Bulk density</b> not determined	
<b>Other information</b> SADT => 131 F (=> 55 C) (see Sect.10)	<b>Explosion limits</b> lower: N/D upper: N/D

### 10. STABILITY AND REACTIVITY

<b>Stability</b> This product is stable at ambient temperatures but may decompose if exposed to temperatures above 122 F (50 C).
<b>Incompatibilities</b> This product is incompatible with strong acids, strong alkalis, reducing agents and accelerators.
<b>Polymerization</b> Hazardous polymerization will not occur.
<b>Decomposition</b> 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).
<b>Conditions to avoid</b> 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.

### 11. TOXICOLOGICAL INFORMATION

<b>Oral LD50</b>	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.
<b>Dermal LD50</b>	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.
<b>Inhalation LC50</b>	Inhalation toxicity is not available for this product.
<b>Skin</b>	Prolonged or repeated skin contact may cause irritation with redness.
<b>Eye</b>	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.
<b>Chronic toxicity/carcinogenicity</b>	Chronic ingestion effects of this product are not known.  Prolonged and/or repeated inhalation may cause respiratory tract irritation.  The carcinogenic/mutagenic properties of this product are not known.  The reproductive toxicity of this product is not known.



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	The neurotoxic effects of this product are not known.  Overexposure to this product may affect the skin, eyes and respiratory system.
<b>Other toxicological information</b>	No other toxic effects for this product are known.

### 12. ECOLOGICAL INFORMATION

<b>Ecotoxicological information</b>	The ecological toxicity of this product is not known.
<b>Bioaccumulation</b>	Chemical fate information on this product is not known.
<b>Other information</b>	Other ecological information on this product is not known.

### 13. DISPOSAL CONSIDERATIONS

<b>Waste disposal in accordance with regulations</b>	The characteristic of reactivity per RCRA would be exhibited by the unused product if it becomes a waste material.
<b>Container disposal</b>	Containers should be drained of residual product before disposal. Empty containers should be disposed of in accordance with all applicable laws and regulations.

### 14. TRANSPORT INFORMATION

<b>Shipping description</b>	ORGANIC PEROXIDE TYPE D, SOLID (DI-2,4-DICHLOROBENZOYL PEROXIDE, 50%) 5.2, UN3106, PG II NORTH AMERICAN ERG NO: 145
<b>Required labels</b>	ORGANIC PEROXIDE.
<b>Environmentally hazardous substance</b>	This product does not contain an environmentally hazardous substance per 49 CFR 172.101, Appendix A.

### 15. REGULATORY INFORMATION

<b>Products and/or components listed below are subject to the following:</b>	
<b>Di-2,4-dichlorobenzoyl peroxide</b>	
New Jersey R-T-K Hazard. Sub.	yes
Toxic Subst. Cont. Act -listed	yes
Domestic Substance List-Canada	yes
<b>Polydimethylsiloxane</b>	
Toxic Subst. Cont. Act -listed	yes
Domestic Substance List-Canada	yes
<b>Water</b>	
Toxic Subst. Cont. Act -listed	yes
Domestic Substance List-Canada	yes



## Perkadox PD-50S-ps-a

Hazard classes	
Description	Applicable
HMIS Hazard Rating Source	HMIS
HMIS Health	3
HMIS Flammability	2
HMIS Reactivity	1
WHMIS Hazard Class	C, D-2B, F

### Other regulatory information

No other regulatory information is available on this product.

## 16. OTHER INFORMATION

### Other information

PERKADOX is a registered trademark of Akzo Nobel Chemicals Inc.

### Created by

Product Safety 914/694-5000

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