SECTION 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

PRODUCT NAME
Perkadox TML

CHEMICAL NAME
Di-2,4-dichlorobenzoyl peroxide

SYNONYM
Peroxide, bis(2,4-dichlorobenzoyl)

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
3/05/1998

ISSUE DATE
3/05/1998

REVISION NO.
000

SECTION 2. COMPOSITION/INFORMATION ON INGREDIENTS

SUBSTANCE DESCRIPTION	PERCENT	CAS#
Di-2,4-dichlorobenzoyl peroxide	** 49.000- 51.000	133-14-2
Aliphatic hydrocarbon	20.000- 30.000	64771-72-8
Butoxypolypropyleneoxy-polyethyleneoxyethanol	** 5.000- 10.000	9038-95-3
Polysorbate 80	2.000- 6.000	9005-65-6
Water	12.000- 18.000	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 SKIN, EYE AND RESPIRATORY TRACT IRRITATION.
MAY CAUSE HEADACHE, DIZZINESS AND NAUSEA.

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
May cause irritation of the nose, throat and lungs.

SECTION 3. HAZARDS IDENTIFICATION (CONTINUED)

Skin Contact - ACUTE
Prolonged skin contact may cause irritation and redness.

Eye contact - ACUTE
Eye contact may cause mild irritation.

Ingestion - ACUTE
If swallowed, this product may cause severe irritation of the mouth, throat, and stomach.

CARCINOGENICITY

IARC	....NO	OSHA	....NO
NTP	....NO	ACGIH	....NO

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.

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

Extinquishing 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) and hydrogen chloride.

NFPA HEALTH RATING
3

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.

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 MAXIMUM STORAGE TEMPERATURE shown below.
To prevent possible self-accelerating decomposition, temperatures in the storage facility must not exceed 122 F (50 C).

Keep containers tightly closed. Store away from amines, acids alkalis and heavy metal compounds (e.g. driers, metal soaps 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.

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

Other than any exposure limits which may be displayed in Section 8, there are no other known exposure limits applicable to this product or its components.

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
Aliphatic hydrocarbon						
	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	1400.0000	N/D	N/D
Butoxypolypropyleneoxy-polyethyleneoxyethanol						
	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
Polysorbate 80						
	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

BOILING POINT
N/D F N/D C

ODOR THRESHOLD (ppm)
N/D

SPECIFIC GRAVITY
1.25 @ 25 deg C

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 Section 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) and hydrogen chloride.

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.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicological - Inhalation
Acute toxicity data (LC50) is not available for this product. This product may cause mild respiratory tract irritation and central nervous system depression.

Inhalation Chronic Exposure
Chronic inhalation effects of this product are not known. This product is expected to cause mild respiratory tract irritation and central nervous system depression.

Toxicological - Dermal
Acute dermal data (LD50) is not available for this product. This product is expected to cause mild irritation.

Skin Contact - CHRONIC
Chronic dermal effects for this product are not known. This product is expected to cause mild irritation.

Toxicological - Eye
A 50% concentration of the peroxide in silicone fluid is mildly irritating to rabbits.

Toxicological - Ingestion
Acute oral toxicity data (LD50) is not available for this product. The oral LD50 in rats for a 50% concentration of the peroxide in silicone fluid is greater than 5000 mg/kg (practically nontoxic).

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, respiratory tract and central nervous 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.

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-DICHLOROBENZOYLPEROXIDE, 50%)
5.2, UN3106, PG II
NORTH AMERICAN EMERGENCY RESPONSE GUIDE 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

Enviromental List

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

Component Aliphatic hydrocarbon is subject to the following

Enviromental List

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

Component Butoxypolypropyleneoxy-polyethyleneoxyethanol is subject to the following

Enviromental List

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

SECTION 15. REGULATORY INFORMATION (CONTINUED)

Component Polysorbate 80 is subject to the following

Enviromental List

TSCA	Toxic Subst. Cont. Act -listed

Component Water is subject to the following

Enviromental List

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

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
2

FLAMMABILITY
2

OTHER

SECTION 16. OTHER INFORMATION

OTHER INFORMATION
PERKADOX is a registered trademark of Akzo Nobel Chemicals Inc.

CREATED BY
PRODUCT SAFETY 914-674-5000

KEY TO ABBREVIATIONS:

EQ=EQual	LT=Less Than	GT=Greater Than
AP=APproximately	TR=TRace	ND=No Data available