

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

Product name	0909 Raderal Hardener Red
Product code	37209094
Intended use of the substance/preparation	
Hardener for professional use	
Supplier	DuPont (New Zealand) Ltd.
Street address	98 Kerrs Road, Wiri, Manukau City, Auckland New Zealand
Telephone	(64)-9268-5500
Telefax	(64)-9268-5490
Emergency telephone	NZ Poisons Information Centre Ph: 0800 764 766
Date of preparation	date

2. Hazards identification

Classified as a Dangerous Good according to NZS 5433
 Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001

HSNO Classification

Skin corrosion/irritation	Category 6.3B
Serious eye damage/eye irritation	Category 6.4A
Respiratory sensitization	Category 6.5A
Skin sensitization	Category 6.5B
Acute aquatic toxicity	Category 9.1A
Chronic aquatic toxicity	Category 9.1A

Endpoints which are "not classified", "cannot classified" and "not applicable" are not shown

GHS-Labeling



Hazard symbols

Signal word Danger

Hazard statements Causes mild skin irritation.
 Causes serious eye irritation.
 May cause an allergic skin reaction.
 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 Very toxic to aquatic life.
 Very toxic to aquatic life with long lasting effects.

Precautionary statements Contaminated work clothing should not be allowed out of the workplace.
 Wear eye/face protection.
 Avoid breathing dust/fume/gas/mist/vapours/spray.
 In case of inadequate ventilation wear respiratory protection.
 Use only outdoors or in a well-ventilated area.
 Wear protective gloves.
 Call a POISON CENTRE or doctor/physician if you feel unwell.
 If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
 If eye irritation persists: Get medical advice/attention.
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
 IF ON SKIN: Wash with plenty of soap and water.
 If skin irritation or rash occurs: Get medical advice/attention.
 Specific treatment (see supplemental first aid instructions on this label).
 Wash contaminated clothing before reuse.
 Wash hands after handling.

Store in a well-ventilated place. Keep container tightly closed.
Store locked up.
Dispose of contents/container in accordance with local regulation.

Other hazards which do not result in classification

3. Composition/information on ingredients

Pure substance/mixture

Mixture

CAS-No.	Chemical Name	Concentration	GHS	Haz-ardous
94-36-0	dibenzoyl peroxide	40 - 50%	✓	
84-69-5	Diisobutyl phthalate	20 - 30%	✓	
9004-62-0	Hydroxy ethyl cellulose	0.1 - 0.3%	✓	

Non-regulated ingredients 20 - 30%

4. First aid measures

Eye contact

Remove contact lenses. Irrigate copiously with clean, fresh water for at least 15 minutes, holding the eyelids apart. Seek medical advice.

Skin contact

Do NOT use solvents or thinners. Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. If skin irritation persists, call a physician.

Inhalation

Avoid inhalation of vapour or mist. Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

Ingestion

If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting. Keep at rest.

Most Important Symptoms/effects, acute and delayed

Inhalation

May cause nose and throat irritation.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Notes to physician

No data available on the product. See section 3 and 11 for hazardous ingredients found in the product.

5. Fire-fighting measures

Suitable extinguishing media

Water spray, Dry chemical, Foam.

Extinguishing media which shall not be used for safety reasons

High volume water jet

Specific hazards

Vapours may form explosive mixtures with air. Do not allow run-off from fire fighting to enter drains or water courses. Solvent vapours are heavier than air and may spread along floors. Never use pressure to empty container: container is not a pressure vessel. Always keep in containers of same material as the original one.

Special Protective Equipment and Fire Fighting Procedures

Wear as appropriate: Full protective flameproof clothing. Wear self contained breathing apparatus for fire fighting if necessary. In the event of fire, cool tanks with water spray. Do not allow run-off from fire fighting to enter drains or water courses.

Hazchem Code

1W

6. Accidental release measures

Personal precautions

Keep in a well-ventilated place. Keep away from sources of ignition. Comply with safety directives (see chapters 7 and 8). Do not inhale vapours.

Environmental precautions

Do not let product enter drains. Notify the respective authorities in accordance with local law in the case of contamination of rivers, lakes or waste water systems.

Methods for cleaning up

Contain and collect spillage with non-combustible absorbent materials, e.g. sand, earth, vermiculite, diatomaceous earth and place in container for disposal according to local regulations. Clean preferably with a detergent; avoid use of solvents.

7. Handling and storage

Handling

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Safe handling advice

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Preparation may charge electrostatically: always use grounded leads when transferring from one container to another. Operators should wear antistatic footwear and clothing. No sparking tools should be used. Avoid skin and eye contact. Do not breathe vapours or spray mist. Smoking, eating and drinking should be prohibited in the application area.

Storage

Suitable storage conditions

Observe label precautions. Store between 5 and 25 °C in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. No smoking. Prevent unauthorized access. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Suitable container and packaging materials for safe storage

Always keep in containers made of the same material as the supply container.

8. Exposure controls/personal protection

Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

**National occupational exposure limits
 Workplace Exposure Standards (WESs) 2002**

Chemical Name		
dibenzoyl peroxide	TWA	5 mg/m3
Diisobutyl phthalate	TWA	5 mg/m3

Engineering measures

Provide adequate ventilation. This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Protective equipment

Personal protective equipment should be worn to prevent contact with eyes, skin or clothing.

Respiratory protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Eye protection

Wear protective eyewear for protection against solvent spatter.

Hand protection

The breakthrough time of gloves is unknown for the product itself. The glove material given is recommended on basis of the substances in the preparation.

Glove material	Glove thickness	Break through time
Nitrile rubber	0.33 mm	60 min

The protective glove should be checked in each case for their work specific suitability (e.g. mechanical stability, product compatibility, and anti-static properties). When the intended use is for spray application a nitrile glove of the chemical resistance group 3 (e.g. Dermatril® glove) is to be used. After contamination, the glove has to be changed. If immersing the hands into the product is not avoidable (e.g. maintenance work) a butyl or fluorocarbon rubber glove should be used. When skin exposure may occur to materials specified in section 3 of this SDS, advice should be sought from the glove supplier as to appropriate type to use with this product and the permeation breakthrough times. Care should be taken when working with sharp edged articles as these can easily damage the gloves and make them ineffective. The instructions and information provided by the glove supplier on use, storage, maintenance and replacement must be followed. Damaged gloves or those showing signs of wear should be replaced immediately.

Skin and body protection

Wear suitable protective clothing. Personnel should wear antistatic clothings made of natural fiber or of high temperature resistant synthetic fiber.

Hygiene measures

Wash skin thoroughly with soap and water or use recognized skin cleanser. Do not use organic solvents!

9. Physical and chemical properties

Appearance

Form : liquid Colour: red Odor Threshold : no data available

pH	Not applicable.	
Freezing point	Not applicable.	
Boiling point	Not applicable.	
Flash point	Not applicable.	DIN 53213/ISO1523
Evaporation rate	Slower than Ether	
Flammability		
Upper explosion limit	Not applicable.	
Lower explosion limit	Not applicable.	
Vapour pressure	Not applicable.	
Solubility	appreciable	
Vapour density	no data available	
Density	1.1 g/cm ³	DIN 53217/ISO 2811
Partition coefficient: n-octanol/water	no data available	
Ignition temperature	Not applicable.	DIN 51794
Decomposition temperature		
Viscosity (23 °C)	60 s	ISO 2431-1993 6 mm

10. Stability and reactivity

Stability

Stable

Hazardous polymerisation

Will not occur.

Conditions to avoid

Stable under recommended storage and handling conditions (see section 7).

Materials to avoid

Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions. Store separately from combustible materials, reducing agents (e.g. amines), acids, alkalis and heavy metal compounds (e.g. accelerators, driers, metal soaps)

Hazardous decomposition products

When exposed to high temperatures may produce hazardous decomposition products such as carbon monoxide and dioxide, smoke, benzoic acid, benzene, diphenyl, phenylbenzoate; for cyclohexanone peroxides, hexane carbonic acid, lauric carbon acid, cyclohexane.

11. Toxicological information

Information on the likely routes of exposure

Inhalation

May cause nose and throat irritation.

Ingestion

May result in gastrointestinal distress.

Skin or eye contact:

May cause irritation or burning of the eyes. Repeated or prolonged liquid contact may cause skin irritation with discomfort and dermatitis.

Delayed and immediate effects and also chronic effects from short and long term exposure:

Skin corrosion/irritation

dibenzoyl peroxide Category 3

Serious eye damage/eye irritation

dibenzoyl peroxide Category 2A

Respiratory sensitization

dibenzoyl peroxide Category 1

Skin sensitization

dibenzoyl peroxide Category 1

Numerical measures of toxicity (acute toxicity estimation (ATE), etc.)

No information available.

Symptoms related to the physical, chemical and toxicological characteristics

No information available.

12. Ecological information

Product contains environmentally hazardous substances and product is classified per GHS.

Ecotoxicity effects

There are no data available on the product itself. The product should not be allowed to enter drains or watercourses.

Acute aquatic toxicity

dibenzoyl peroxide	Category 1
Diisobutyl phthalate	Category 1

Chronic aquatic toxicity

Diisobutyl phthalate	Category 1
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% of unknown composition 0.2%

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Mobility in soil

No information available.

Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

Waste disposal methods:

Dispose of in accordance with local regulations.

Disposal considerations:

A disposal process that converts the waste into energy is recommended. If this is not possible the hazardous waste must be disposed of by incineration.

14. Transport information

NZS5433

Proper shipping name:	ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide)
UN-Number:	3108
Hazard Class:	5.2
Packing group:	
Hazchem Code:	1W

IMDG (Sea transport)

Proper shipping name:	ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide)
UN-Number:	3108
Hazard Class:	5.2
Subsidiary Hazard Class:	Not applicable.
Packing group:	
Marine Pollutant:	N
EmS:	F-J,S-R

ICAO/IATA (Air transport)

Proper shipping name:	ORGANIC PEROXIDE TYPE E, SOLID (dibenzoyl peroxide)
UN-Number:	3108
Hazard Class:	5.2
Subsidiary Hazard Class:	Not applicable.
Packing group:	

Matters needing attention for transportation

Confirm that there is no breakage, corrosion, or leakage from the container before shipping. Be sure to prevent damage to cargo by loading so as to avoid falling, dropping, or collapse. Ship in appropriate containers with denotation of the content in accordance with the relevant statutes and rules.

15. Regulatory information**National regulatory information**

HSNO Approval Code	HSR002670
HSNO Control A	This product must be under the control of an approved handler during use.
HSNO Control T	This product must be tracked.
HSNO Classification	
Skin corrosion/irritation	Category 6.3B
Serious eye damage/eye irritation	Category 6.4A
Respiratory sensitization	Category 6.5A
Skin sensitization	Category 6.5B
Acute aquatic toxicity	Category 9.1A
Chronic aquatic toxicity	Category 9.1A

16. Other information

Sources of key data used to compile the Safety Data Sheet
Department

DuPont (New Zealand) Ltd.
98 Kerrs Road, Wiri, Manukau City, Auckland
New Zealand

Data Review Department
Issuing date

Regulatory Affairs
date

Revision Note

Version	Changes
2.0	2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16

Revision Date: 2009-10-15

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