

Dunlop Rapidflex

Ardex (Ardex NZ)

Chemwatch: **16-3978** Version No: **2.1.1.1** Safety Data Sheet according to HSNO Regulations Chemwatch Hazard Alert Code: 3

Issue Date: 01/01/2013 Print Date: 30/05/2014 Initial Date: Not Available S.GHS.NZL.EN

SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

Product Identifier

Product name	Dunlop Rapidflex
Chemical Name	Not Applicable
Synonyms	Not Available
Proper shipping name	Not Applicable
Chemical formula	Not Applicable
Other means of identification	Not Available
CAS number	Not Applicable

Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses	Use according to manufacturer's directions.
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Details of the supplier of the safety data sheet

Registered company name	Ardex (Ardex NZ)	Ardex (Ardex Australia)
Address	32 Lane Street Woolston Christchurch New Zealand	20 Powers Road Seven Hills 2147 NSW Australia
Telephone	+64 3384 3029	1800 224 070
Fax	+64 3384 9779	+61 2 9838 7817
Website	Not Available	Not Available
Email	Not Available	Not Available

Emergency telephone number

Association / Organisation	Not Available	Not Available	
Emergency telephone numbers	1800 222 841 (General information)	1800 222 841	
Other emergency telephone numbers	1800 222 841 (General information)	1800 222 841	

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Not regulated for transport of Dangerous Goods.

CHEMWATCH HAZARD RATINGS

	Min	Max	
Flammability	1 🔜		
Toxicity	2	1	0 = Minimum
Body Contact	3		1 = Low
Reactivity	1 🗾	1	2 = Moderate 3 = High
Chronic	3		4 = Extreme

GHS Classification ^[1]	Skin Corrosion/Irritation Category 2, Serious Eye Damage Category 1, Skin Sensitizer Category 1, Carcinogen
GHS Classification "	Category 1, STOT - SE (Resp. Irr.) Category 3, Chronic Aquatic Hazard Category 1

Page 2 of 9
Dunlop Rapidflex

Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI	
Determined by Chemwatch using GHS/HSNO criteria	6.3A, 6.5B (contact), 6.7A, 6.9 (respiratory), 8.3A, 9.1A	
Label elements		

GHS label elements			

SIGNAL WORD DANGER

Hazard statement(s)

H315	Causes skin irritation
H318	Causes serious eye damage
H317	May cause an allergic skin reaction
H350	May cause cancer
H335	May cause respiratory irritation
H410	Very toxic to aquatic life with long lasting effects

Precautionary statement(s): Prevention

P201	Obtain special instructions before use.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.

Precautionary statement(s): Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P310	Immediately call a POISON CENTER/doctor/physician/first aider
P321	Specific treatment (see advice on this label).

Precautionary statement(s): Storage

P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.

Precautionary statement(s): Disposal

Dispose of contents/container to authorised chemical landfill or if organic to high temperature incineration

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

P501

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
65997-15-1	30-60	portland cement
14808-60-7.	10-30	graded sand
Not avail.	10-30	rubber powder
Not Available	<10	additives

SECTION 4 FIRST AID MEASURES

NZ Poisons Centre 0800 POISON (0800 764 766) | NZ Emergency Services: 111

Description of first aid measures

Eye Contact	 If this product comes in contact with the eyes: Immediately hold eyelids apart and flush the eye continuously with running water. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	 If skin or hair contact occurs: Immediately flush body and clothes with large amounts of water, using safety shower if available. Quickly remove all contaminated clothing, including footwear. Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre. Transport to hospital, or doctor.
Inhalation	 If fumes or combustion products are inhaled remove from contaminated area. Lay patient down. Keep warm and rested. Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary. Transport to hospital, or doctor.
Ingestion	 For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed. If swallowed do NOT induce vomiting. If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration. Observe the patient carefully. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink. Transport to hospital or doctor without delay.

Indication of any immediate medical attention and special treatment needed

	Treat symptomatically.	
SECTION 5 FIREFIGHTING MEASURES		
Extinguishing media		

There is no restriction on the type of extinguisher which may be used. Use extinguishing media suitable for surrounding area.

Special hazards arising from the substrate or mixture

Fire Incompatibility	 Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result

Advice for firefighters

Fire Fighting	 Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus plus protective gloves in the event of a fire. Prevent, by any means available, spillage from entering drains or water courses. Use fire fighting procedures suitable for surrounding area.
Fire/Explosion Hazard	 Solid which exhibits difficult combustion or is difficult to ignite. Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust (420 micron or less) may burn rapidly and fiercely if ignited; once initiated larger particles up to 1400 microns diameter will contribute to the propagation of an explosion. A dust explosion may release large quantities of gaseous products; this in turn creates a subsequent pressure rise of explosive force capable of damaging plant and buildings and injuring people.

Personal precautions, protective equipment and emergency procedures

Minor Spills	 Remove all ignition sources. Clean up all spills immediately. Avoid contact with skin and eyes. Control personal contact with the substance, by using protective equipment.
Major Spills	 Moderate hazard. CAUTION: Advise personnel in area. Alert Emergency Services and tell them location and nature of hazard. Control personal contact by wearing protective clothing.
	Personal Protective Equipment advice is contained in Section 8 of the MSDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	 Avoid all personal contact, including inhalation. Wear protective clothing when risk of exposure occurs. Use in a well-ventilated area. Prevent concentration in hollows and sumps.
Other information	 Store in original containers. Keep containers securely sealed. Store in a cool, dry, well-ventilated area. Store away from incompatible materials and foodstuff containers.

Conditions for safe storage, including any incompatibilities

Suitable container	 Polyethylene or polypropylene container. Check all containers are clearly labelled and free from leaks.
Storage incompatibility	 Avoid strong acids, acid chlorides, acid anhydrides and chloroformates. Avoid contact with copper, aluminium and their alloys. Avoid reaction with oxidising agents

PACKAGE MATERIAL INCOMPATIBILITIES

Not Available

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	portland cement	Portland cement	10 (mg/m3)	Not Available	Not Available	The value for inhalable dust containing no asbestos and less than 1% free silica.
New Zealand Workplace Exposure Standards (WES)	graded sand	Silica- Crystalline, Quartz	0.2 Respirable dust (mg/m3)	Not Available	Not Available	Not Available

EMERGENCY LIMITS

Ingredient	TEEL-0 TEEL-1 TEEL-2			TEEL-3	
graded sand	0.3(ppm)	0.3(ppm)	ו)	50(ppm)	
Ingredient	Original IDLH			Revised IDLH	
portland cement	N.E.(mgm3)N.E.(ppm)			5,000(mgm3)	
graded sand	N.E.(mgm3)N.E.(ppm)			50(mgm3)	

Exposure controls

Appropriate engineering	Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard.
controls	Well-designed engineering controls can be highly effective in protecting workers and will typically be independent

Page 5 of 9
Dunlop Rapidflex

	of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.
Personal protection	
Eye and face protection	Chemical goggles. Full face shield may be required for supplementary but never for primary protection of eyes. Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.
Skin protection	See Hand protection below
Hands/feet protection	 NOTE: The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact. Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed. The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer.
Body protection	See Other protection below
Other protection	 Overalls. P.V.C. apron. Barrier cream.
Thermal hazards	Not Available

Recommended material(s)

GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the $\emph{computer-generated}$ selection:

Dunlop Rapidflex Not Available

Material	СРІ
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* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion
C: Poor to Dangerous Choice for other than short term immersion
NOTE: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

Respiratory protection

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 10 x ES	P1 Air-line*	-	PAPR-P1 -
up to 50 x ES	Air-line**	P2	PAPR-P2
up to 100 x ES	-	P3	-
		Air-line*	-
100+ x ES	-	Air-line**	PAPR-P3

* - Negative pressure demand ** - Continuous flow

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Green to grey odourless powder; disperses in water.		
Physical state	Divided Solid	Relative density (Water = 1)	1.1 approx.
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	Not Applicable	Decomposition temperature	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Applicable

Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Available	Taste	Not Available
Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	Not Available	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Applicable
Vapour pressure (kPa)	Not Applicable	Gas group	Not Available
Solubility in water (g/L)	Partly Miscible	pH as a solution(1%)	Not Applicable
Vapour density (Air = 1)	Not Applicable	VOC g/L	Not Available

SECTION 10 STABILITY AND REACTIVITY

Reactivity	See section 7
Chemical stability	Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerisation will not occur.
Possibility of hazardous reactions	See section 7
Conditions to avoid	See section 7
Incompatible materials	See section 7
Hazardous decomposition products	See section 5

SECTION 11 TOXICOLOGICAL INFORMATION

Information on toxicological effects

Inhaled	Inhalation of dusts, generated by the material during the course of normal handling, may be damaging to the health of the individual. Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled. If prior damage to the circulatory or nervous systems has occurred or if kidney damage has been sustained, proper screenings should be conducted on individuals who may be exposed to further risk if handling and use of the material result in excessive exposures. Effects on lungs are significantly enhanced in the presence of respirable particles.
Ingestion	The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.
Skin Contact	The material can produce chemical burns following direct contact with the skin. Handling wet cement can cause dermatitis. Cement when wet is quite alkaline and this alkali action on the skin contributes strongly to cement contact dermatitis since it may cause drying and defatting of the skin which is followed by hardening, cracking, lesions developing, possible infections of lesions and penetration by soluble salts. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds or lesions, may produce systemic injury with harmful effects.
Eye	The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating. When applied to the eye(s) of animals, the material produces severe ocular lesions which are present twenty-four hours or more after instillation.
Chronic	Repeated or prolonged exposure to corrosives may result in the erosion of teeth, inflammatory and ulcerative changes in the mouth and necrosis (rarely) of the jaw. Bronchial irritation, with cough, and frequent attacks of bronchial pneumonia may ensue. Gastrointestinal disturbances may also occur. Chronic exposures may result in dermatitis and/or conjunctivitis.
Dunlop Rapidflex	TOXICITY IRRITATION Not Available Not Available

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a sufficient second	ΤΟΧΙΟΙΤΥ	IRRITATION
portland cement	Not Available	Not Available
	TOXICITY	IRRITATION
graded sand	Not Available	Not Available
	ΤΟΧΙΟΙΤΥ	IRRITATION
rubber powder	Not Available	Not Available

* Value obtained from manufacturer's msds

unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances

Dunlop Rapidflex	may be due to a non-allergenic con occur following exposure to high le include the absence of preceding re asthma-like symptoms within minut pattern, on spirometry, with the pre	ue for months or even years after expose dition known as reactive airways dysfur vels of highly irritating compound. Key of espiratory disease, in a non-atopic indivi- es to hours of a documented exposure is sence of moderate to severe bronchial inimal lymphocytic inflammation, withou is of RADS.	nction syndrome (RADS) which can criteria for the diagnosis of RADS dual, with abrupt onset of persistent to the irritant. A reversible airflow hyperreactivity on methacholine
PORTLAND CEMENT	Contact allergies quickly manifest t oedema. The pathogenesis of conta	contact allergens as a group and may n hemselves as contact eczema, more ra act eczema involves a cell-mediated (T n reactions, e.g. contact urticaria, involv	rely as urticaria or Quincke's lymphocytes) immune reaction of
GRADED SAND	No significant acute toxicological da	ata identified in literature search.	
Acute Toxicity	0	Carcinogenicity	v
Skin Irritation/Corrosion	×	Reproductivity	0
Serious Eye Damage/Irritation	¥	STOT - Single Exposure	✓
Respiratory or Skin sensitisation	~	STOT - Repeated Exposure	0

Aspiration Hazard

0

CMR STATUS

Not Applicable

SECTION 12 ECOLOGICAL INFORMATION

Mutagenicity

0

Toxicity

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
Not Available	Not Available	Not Available

Bioaccumulative potential

Ingredient	Bioaccumulation
Not Available	Not Available
	>

Mobility in soil

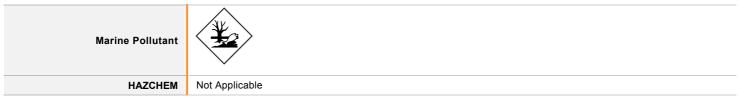
Ingredient	Mobility
Not Available	Not Available

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods	
Product / Packaging disposal	Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate: Reduction Reuse Recycling Disposal (if all else fails) This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use.
	Insure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.

SECTION 14 TRANSPORT INFORMATION

Labels Required



Land transport (): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

SECTION 15 REGULATORY INFORMATION

Safety, health and environmental regulations / legislation specific for the substance or mixture

This substance is to be managed using the conditions specified in an applicable Group Standard

his substance is to be managed using the conditions specified in an applicable Group Standard	
HSR Number	Group Standard
HSR002596	Laboratory Chemicals and Reagent Kits Group Standard 2006
HSR002531	Cleaning Products (Toxic [6.7]) Group Standard 2006
HSR002607	Lubricants (Toxic [6.7]) Group Standard 2006
HSR002520	Aerosols (Toxic [6.7]) Group Standard 2006
HSR002586	Fuel Additives (Toxic [6.7]) Group Standard 2006
HSR002646	Polymers (Toxic [6.7]) Group Standard 2006
HSR002616	Metal Industry Products (Toxic [6.7]) Group Standard 2006
HSR002625	N.O.S. (Toxic [6.1, 6.7]) Group Standard 2006
HSR002639	Photographic Chemicals (Toxic [6.7]) Group Standard 2006
HSR002512	Additives, Process Chemicals and Raw Materials (Toxic [6.7]) Group Standard 2006
HSR002560	Dental Products (Toxic [6.7]) Group Standard 2006
HSR002568	Embalming Products (Toxic [6.7]) Group Standard 2006
HSR002679	Surface Coatings and Colourants (Toxic [6.7]) Group Standard 2006
HSR002687	Water Treatment Chemicals (Toxic [6.7]) Group Standard 2006
HSR100425	Pharmaceutical Active Ingredients Group Standard 2010
HSR002601	Leather and Textile Products (Toxic [6.7]) Group Standard 2006
HSR002545	Construction Products (Toxic [6.7A]) Group Standard 2006
HSR002551	Corrosion Inhibitors (Toxic [6.7]) Group Standard 2006
HSR002648	Refining Catalysts Group Standard 2006

Page 9 of 9

Dunlop Rapidflex

SR002655	Solvents (Toxic [6.7]) Group Standard 2006
portland cement(65997-15-1) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)","International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs","OECD List of High Production Volume (HPV) Chemicals","New Zealand Workplace Exposure Standards (WES)","UNECE - Kiev Protocol on Pollutant Release and Transfer Registers - Annex II"
graded sand(14808-60-7.) is found on the following regulatory lists	"New Zealand Inventory of Chemicals (NZIoC)","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data","United Nations Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or Not Approved by Governments","FisherTransport Information","International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs","OECD List of High Production Volume (HPV) Chemicals","New Zealand Workplace Exposure Standards (WES)","OECD Existing Chemicals Database","Sigma-AldrichTransport Information","International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs", "OECD Existing Chemicals Database", "Sigma-AldrichTransport Information", "New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals","New Zealand Hazardous Substances and New Organisms (HSNO) Act - Chemicals (single components)"
rubber powder(Not avail.) is found on the following regulatory lists	

SECTION 16 OTHER INFORMATION

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:

www.chemwatch.net/references

The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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