

Paslode - STOCKade Nickel Cadmium Battery

Paslode - STOCKade

Chemwatch Hazard Alert Code: 0

Chemwatch: 4793-91

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Safety Data Sheet according to HSNO Regulations

S.GHS.NZL.EN

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

Product Identifier

Product name	Paslode - STOCKade Nickel Cadmium Battery
Synonyms	Product Code: B20544E, B20542, B30150, A12910
Other means of identification	Not Available

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

Relevant identified uses	For the battery cell, chemical materials are stored in a hermetically sealed metal case, designed to withstand temperatures and pressures encountered during normal use. Sealed battery is Nonhazardous.
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Details of the supplier of the safety data sheet

Registered company name	Paslode - STOCKade
Address	8 Orbit Drive Auckland Rosedale New Zealand
Telephone	+64 9 477 3000
Fax	+64 9 477 3001
Website	www.paslode.co.nz
Email	tech@paslode.co.nz

Emergency telephone number

Association / Organisation	NZ Poisons Centre
Emergency telephone numbers	0800 POISON
Other emergency telephone numbers	0800 764 766

SECTION 2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

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

Classification	Not Applicable
Determined by Chemwatch using GHS/HSNO criteria	Not Available

Label elements

GHS label elements	Not Applicable
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SIGNAL WORD	NOT APPLICABLE
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Hazard statement(s)

Not Applicable

Precautionary statement(s) Prevention

Continued...

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Not Applicable

Precautionary statement(s) Response

Not Applicable

Precautionary statement(s) Storage

Not Applicable

Precautionary statement(s) Disposal

Not Applicable

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
		hermetically sealed case containing:
7439-89-6	20-65	<u>iron</u>
7440-02-0	15-40	<u>nickel</u>
7440-43-9	10-40	<u>cadmium</u>
7440-48-4	0-3	<u>cobalt</u>
1333-86-4	0-1	<u>carbon black</u>
1310-73-2		<u>sodium hydroxide</u>
1310-66-3		<u>lithium hydroxide</u>
1310-58-3	<5	<u>potassium hydroxide</u>

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: <ul style="list-style-type: none">▶ Wash out immediately with fresh 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.▶ Seek medical attention without delay; if pain persists or recurs seek medical attention.▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.
Skin Contact	If skin or hair contact occurs: <ul style="list-style-type: none">▶ Flush skin and hair with running water (and soap if available).▶ Seek medical attention in event of irritation.
Inhalation	<ul style="list-style-type: none">▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area.▶ Other measures are usually unnecessary.
Ingestion	Not considered a normal route of entry. For advice, contact a Poisons Information Centre or a doctor at once. Urgent hospital treatment is likely to be needed.

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES

Extinguishing media

- ▶ Water spray or fog.
- ▶ Foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).
- ▶ Carbon dioxide.

Special hazards arising from the substrate or mixture

Fire Incompatibility	None known.
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Advice for firefighters

Fire Fighting	<ul style="list-style-type: none"> ▶ 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. ▶ DO NOT approach containers suspected to be hot. ▶ Cool fire exposed containers with water spray from a protected location. ▶ If safe to do so, remove containers from path of fire.
Fire/Explosion Hazard	<ul style="list-style-type: none"> ▶ Non combustible. ▶ Not considered a significant fire risk, however containers may burn. <p>May emit corrosive fumes.</p>

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	<ul style="list-style-type: none"> ▶ Clean up all spills immediately. ▶ Secure load if safe to do so. ▶ Bundle/collect recoverable product. ▶ Collect remaining material in containers with covers for disposal. <p> Dilute the leaked electrolyte with water and neutralize with diluted sulfuric acid [Mfr]. Collect and keep loose batteries electrically isolated from each other.</p>
Major Spills	<ul style="list-style-type: none"> ▶ Clean up all spills immediately. ▶ Secure load if safe to do so. ▶ Bundle/collect recoverable product. ▶ Collect remaining material in containers with covers for disposal. <p> Dilute the leaked electrolyte with water and neutralize with diluted sulfuric acid [Mfr].</p>

Personal Protective Equipment advice is contained in Section 8 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

Safe handling	<p>Use good occupational work practice. Observe manufacturer's storage and handling recommendations contained within this SDS.</p> <p>Avoid physical damage to containers.</p> <p> Avoid short circuiting the cell. Avoid mechanical damage of the cell. Do not open or disassemble. Do not connect the positive terminal to the negative terminal with electrical wire or chain. Avoid polarity reverse connection when installing the battery to an instrument. Do not wet the battery with water, seawater or acid; or expose to strong oxidizer. Keep the battery away from heat and fire. Do not disassemble or reconstruct the battery; or solder the battery directly. Do not give a mechanical shock or deform.</p>
Other information	<ul style="list-style-type: none"> ▶ Keep dry. ▶ Store under cover. ▶ Protect containers against physical damage. ▶ Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

Suitable container	<p>Store in original containers.</p> <p> Carton. Insulative and tear-proof materials.</p>
Storage incompatibility	<ul style="list-style-type: none"> ▶ Avoid strong acids, acid chlorides, acid anhydrides and chloroformates. <p> Conductive materials and water. Do not store cells loose.</p>

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

OCUPATIONAL EXPOSURE LIMITS (OEL)

INGREDIENT DATA

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Source	Ingredient	Material name	TWA	STEL	Peak	Notes
New Zealand Workplace Exposure Standards (WES)	iron	Particulates not otherwise classified	10 Inhalable dust; 3 Respirable dust mg/m3	Not Available	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	nickel	Nickel metal	1 mg/m3	Not Available	Not Available	Sensitiser;Sensitiser
New Zealand Workplace Exposure Standards (WES)	cadmium	Cadmium & compounds, as Cd	0.01 inhalable dust 0.002 respirable dust mg/m3	Not Available	Not Available	Confirmed carcinogen; Exposure can also be estimated by biological monitoring.
New Zealand Workplace Exposure Standards (WES)	cobalt	Cobalt metal dust & fume, as Co	0.05 mg/m3	Not Available	Not Available	Exposure can also be estimated by biological monitoring.; Suspected carcinogen
New Zealand Workplace Exposure Standards (WES)	carbon black	Carbon black	3 mg/m3	Not Available	Not Available	2011 correction; Suspected carcinogen
New Zealand Workplace Exposure Standards (WES)	sodium hydroxide	Sodium hydroxide	Not Available	Not Available	2 mg/m3	Not Available
New Zealand Workplace Exposure Standards (WES)	lithium hydroxide	Lithium hydroxide	Not Available	1 ppm	Not Available	Not Available
New Zealand Workplace Exposure Standards (WES)	potassium hydroxide	Potassium hydroxide	Not Available	Not Available	2 mg/m3	Not Available

EMERGENCY LIMITS

Ingredient	Material name	TEEL-1	TEEL-2	TEEL-3
iron	Iron	1 mg/m3	11 mg/m3	110 mg/m3
nickel	Nickel	4.5 mg/m3	50 mg/m3	99 mg/m3
cadmium	Cadmium	Not Available	Not Available	Not Available
cobalt	Cobalt	0.18 mg/m3	2 mg/m3	20 mg/m3
carbon black	Carbon black	9 mg/m3	99 mg/m3	590 mg/m3
sodium hydroxide	Sodium hydroxide	Not Available	Not Available	Not Available
lithium hydroxide	Lithium hydroxide	0.091 mg/m3	1 mg/m3	42 mg/m3
lithium hydroxide	Lithium hydroxide monohydrate	0.091 mg/m3	1 mg/m3	42 mg/m3
potassium hydroxide	Potassium hydroxide	0.18 mg/m3	2 mg/m3	54 mg/m3

Ingredient	Original IDLH	Revised IDLH
iron	Not Available	Not Available
nickel	N.E. mg/m3 / N.E. ppm	10 mg/m3
cadmium	50 mg/m3 / 9 mg/m3	9 mg/m3 / 9 [Unch] mg/m3
cobalt	20 mg/m3	20 [Unch] mg/m3
carbon black	N.E. mg/m3 / N.E. ppm	1,750 mg/m3
sodium hydroxide	250 mg/m3	10 mg/m3
lithium hydroxide	Not Available	Not Available
potassium hydroxide	Not Available	Not Available

Exposure controls

Appropriate engineering controls	General exhaust is adequate under normal operating conditions.
Personal protection	
Eye and face protection	None under normal operating conditions. OTHERWISE: ▶ Safety glasses.

Skin protection	See Hand protection below
Hands/feet protection	<ul style="list-style-type: none"> ▶ Wear chemical protective gloves, e.g. PVC. ▶ Wear safety footwear or safety gumboots, e.g. Rubber
Body protection	See Other protection below
Other protection	None under normal operating conditions. If exposure to workplace dust is not controlled, respiratory protection is required; wear SAA approved dust respirator.
Thermal hazards	Not Available

Respiratory protection

None under normal operating conditions.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Hermetically sealed cylindrical battery.		
Physical state	Manufactured	Relative density (Water = 1)	2.4-4.0
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 Applicable	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	Not Applicable	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Applicable
Lower Explosive Limit (%)	Not Applicable	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	Not Applicable	Gas group	Not Available
Solubility in water (g/L)	Immiscible	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	Product is considered stable and 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	Not normally a hazard due to non-volatile nature of product
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Ingestion	Not normally a hazard due to physical form of product. The material can produce chemical burns within the oral cavity and gastrointestinal tract following ingestion.
Skin Contact	Overexposure is unlikely in this form. The material can produce chemical burns following direct contact with the skin.
Eye	Not normally a hazard due to physical form of product. The material can produce chemical burns to the eye following direct contact. Vapours or mists may be extremely irritating.
Chronic	No toxic effects from unit packages. Small capacity cells may be swallowed in non-industrial situations. Cadmium compounds are present in the active electrochemical materials if liberated on deliberate destructive disassembly.

Paslude - STOCKade Nickel Cadmium Battery	TOXICITY	IRRITATION
	Not Available	Not Available
iron	TOXICITY	IRRITATION
	Oral (rat) LD50: 7500 mg/kg ^[1]	Nil reported [Patty]
nickel	TOXICITY	IRRITATION
	Oral (rat) LD50: 5000 mg/kg ^[2]	Not Available
cadmium	TOXICITY	IRRITATION
	Inhalation (monkey) LC50: 0.03 mg/L15 min ^[1]	Nil reported
	Inhalation (monkey) LC50: 0.0467 mg/L15 min ^[1]	
	Inhalation (monkey) LC50: 0.204 mg/L15 min ^[1]	
	Inhalation (monkey) LC50: 0.23 mg/L15 min ^[1]	
	Inhalation (monkey) LC50: 0.94 mg/L15 min ^[1]	
	Inhalation (mouse) LC50: >0.00902 mg/L15 min ^[1]	
	Inhalation (rabbit) LC50: >0.0224 mg/L15 min ^[1]	
	Inhalation (rat) LC50: 0.025 mg/L/30m ^[2]	
Oral (rat) LD50: >63-<259 mg/kg ^[1]		
cobalt	TOXICITY	IRRITATION
	dermal (rat) LD50: >2000 mg/kg ^[1]	Nil Reported
	Oral (rat) LD50: 6170 mg/kg ^[2]	
carbon black	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: >3000 mg/kg ^[2]	Not Available
	Oral (rat) LD50: >8000 mg/kg ^[1]	
sodium hydroxide	TOXICITY	IRRITATION
	Oral (rabbit) LD50: 325 mg/kg ^[1]	Eye (rabbit): 0.05 mg/24h SEVERE
		Eye (rabbit):1 mg/24h SEVERE
		Eye (rabbit):1 mg/30s rinsed-SEVERE
	Skin (rabbit): 500 mg/24h SEVERE	
lithium hydroxide	TOXICITY	IRRITATION
	Inhalation (rat) LC50: 0.96 mg/L/4hr ^[2]	Nil reported
	Oral (rat) LD50: 210 mg/kg ^[2]	
potassium hydroxide	TOXICITY	IRRITATION
	Oral (rat) LD50: 273 mg/kg ^[2]	Eye (rabbit):1mg/24h rinse-moderate
		Skin (human): 50 mg/24h SEVERE
	Skin (rabbit): 50 mg/24h SEVERE	

Legend: 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

NICKEL Tenth Annual Report on Carcinogens: Substance anticipated to be Carcinogen

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	[National Toxicology Program: U.S. Dep. of Health & Human Services 2002] Oral (rat) TDLo: 500 mg/kg/5D-I Inhalation (rat) TCLo: 0.1 mg/m3/24H/17W-C
COBALT	Allergic reactions involving the respiratory tract are usually due to interactions between IgE antibodies and allergens and occur rapidly. Allergic potential of the allergen and period of exposure often determine the severity of symptoms. Some people may be genetically more prone than others, and exposure to other irritants may aggravate symptoms. Allergy causing activity is due to interactions with proteins. Attention should be paid to atopic diathesis, characterised by increased susceptibility to nasal inflammation, asthma and eczema. Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved. Such allergy is of the delayed type with onset up to four hours following exposure.
CARBON BLACK	No significant acute toxicological data identified in literature search. Inhalation (rat) TCLo: 50 mg/m3/6h/90D-I Nil reported
SODIUM HYDROXIDE	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.
LITHIUM HYDROXIDE	The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.
NICKEL & COBALT	The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. The significance of the contact allergen is not simply determined by its sensitisation potential: the distribution of the substance and the opportunities for contact with it are equally important. A weakly sensitising substance which is widely distributed can be a more important allergen than one with stronger sensitising potential with which few individuals come into contact. From a clinical point of view, substances are noteworthy if they produce an allergic test reaction in more than 1% of the persons tested.
NICKEL & COBALT & CARBON BLACK	WARNING: This substance has been classified by the IARC as Group 2B: Possibly Carcinogenic to Humans.
SODIUM HYDROXIDE & POTASSIUM HYDROXIDE	The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.
SODIUM HYDROXIDE & LITHIUM HYDROXIDE & POTASSIUM HYDROXIDE	Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. Industrial bronchitis, on the other hand, is a disorder that occurs as result of exposure due to high concentrations of irritating substance (often particulate in nature) and is completely reversible after exposure ceases. The disorder is characterised by dyspnea, cough and mucus production.
LITHIUM HYDROXIDE & POTASSIUM HYDROXIDE	The material may produce moderate eye irritation leading to inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

Acute Toxicity	☐	Carcinogenicity	☐
Skin Irritation/Corrosion	☐	Reproductivity	☐
Serious Eye Damage/Irritation	☐	STOT - Single Exposure	☐
Respiratory or Skin sensitisation	☐	STOT - Repeated Exposure	☐
Mutagenicity	☐	Aspiration Hazard	☐

Legend: ✗ – Data available but does not fill the criteria for classification
✔ – Data required to make classification available
☐ – Data Not Available to make classification

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

Ingredient	Endpoint	Test Duration (hr)	Species	Value	Source
iron	BCF	24	Crustacea	0.000002mg/L	4
iron	EC50	96	Algae or other aquatic plants	3.7mg/L	4

Continued...

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iron	LC50	96	Fish	0.05mg/L	2
iron	NOEC	504	Fish	0.52mg/L	2
iron	EC50	48	Crustacea	5.11mg/L	2
iron	EC50	504	Crustacea	4.49mg/L	2
nickel	BCF	1440	Algae or other aquatic plants	0.47mg/L	4
nickel	LC50	96	Fish	0.0000475mg/L	4
nickel	EC50	48	Crustacea	0.013mg/L	5
nickel	EC50	72	Crustacea	0.00513mg/L	2
nickel	EC50	72	Algae or other aquatic plants	0.0407mg/L	2
nickel	NOEC	72	Algae or other aquatic plants	0.0035mg/L	2
cadmium	BCF	960	Fish	500mg/L	4
cadmium	LC50	96	Fish	0.001mg/L	4
cadmium	NOEC	168	Fish	0.00001821mg/L	4
cadmium	EC50	336	Crustacea	0.00065mg/L	5
cadmium	EC50	48	Crustacea	0.0033mg/L	5
cadmium	EC50	72	Algae or other aquatic plants	0.018mg/L	2
cobalt	BCF	1344	Fish	0.99mg/L	4
cobalt	LC50	96	Fish	1.406mg/L	2
cobalt	EC50	48	Crustacea	>0.89mg/L	2
cobalt	EC50	504	Crustacea	0.012mg/L	2
cobalt	EC50	72	Algae or other aquatic plants	0.144mg/L	2
cobalt	NOEC	168	Algae or other aquatic plants	0.0018mg/L	2
carbon black	LC50	96	Fish	>100mg/L	2
carbon black	NOEC	720	Fish	17mg/L	2
carbon black	EC50	48	Crustacea	>100mg/L	2
carbon black	EC50	384	Crustacea	4.9mg/L	2
carbon black	EC50	96	Algae or other aquatic plants	95mg/L	2
sodium hydroxide	EC50	384	Crustacea	27901.643mg/L	3
sodium hydroxide	EC50	96	Algae or other aquatic plants	1034.10043mg/L	3
sodium hydroxide	LC50	96	Fish	4.16158mg/L	3
sodium hydroxide	NOEC	96	Fish	56mg/L	4
sodium hydroxide	EC50	48	Crustacea	40.4mg/L	2
lithium hydroxide	LC50	96	Fish	62.2mg/L	2
lithium hydroxide	EC50	48	Crustacea	19.1mg/L	2
lithium hydroxide	EC50	72	Algae or other aquatic plants	1.88mg/L	2
lithium hydroxide	EC50	72	Algae or other aquatic plants	3.29mg/L	2
lithium hydroxide	NOEC	72	Algae or other aquatic plants	0.31mg/L	2
potassium hydroxide	LC50	96	Fish	80mg/L	2
potassium hydroxide	NOEC	24	Fish	28mg/L	2

Legend:

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
sodium hydroxide	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
sodium hydroxide	LOW (LogKOW = -3.8796)

Continued...

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Mobility in soil

Ingredient	Mobility
sodium hydroxide	LOW (KOC = 14.3)

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment methods

Product / Packaging disposal	
	Recycle wherever possible. Consult manufacturer for recycling options. Consult State Land Waste Management Authority for disposal.

Ensure that the disposal of material is carried out in accordance with Hazardous Substances (Disposal) Regulations 2001.

SECTION 14 TRANSPORT INFORMATION

Labels Required

Marine Pollutant	NO
HAZCHEM	Not Applicable

Land transport (UN): 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

Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

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

HSR Number	Group Standard
Not Applicable	Not Applicable

IRON(7439-89-6) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

NICKEL(7440-02-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

CADMIUM(7440-43-9) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

COBALT(7440-48-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

CARBON BLACK(1333-86-4) IS FOUND ON THE FOLLOWING REGULATORY LISTS

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

SODIUM HYDROXIDE(1310-73-2) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

LITHIUM HYDROXIDE(1310-66-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

POTASSIUM HYDROXIDE(1310-58-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

Location Test Certificate

Subject to Regulation 55 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations, a location test certificate is required when quantity greater than or equal to those indicated below are present.

Hazard Class	Quantity beyond which controls apply for closed containers	Quantity beyond which controls apply when use occurring in open containers
Not Applicable	Not Applicable	Not Applicable

Approved Handler

Subject to Regulation 56 of the Hazardous Substances (Classes 1 to 5 Controls) Regulations and Regulation 9 of the Hazardous Substances (Classes 6, 8, and 9 Controls) Regulations, the substance must be under the personal control of an Approved Handler when present in a quantity greater than or equal to those indicated below.

Class of substance	Quantities
Not Applicable	Not Applicable

Refer Group Standards for further information

Tracking Requirements

Not Applicable

National Inventory	Status
Australia - AICS	Y
Canada - DSL	Y
Canada - NDSL	N (nickel; cobalt; potassium hydroxide; iron; carbon black; lithium hydroxide; sodium hydroxide; cadmium)
China - IECSC	Y
Europe - EINEC / ELINCS / NLP	Y
Japan - ENCS	N (nickel; cobalt; iron; cadmium)
Korea - KECI	Y
New Zealand - NZIoC	Y
Philippines - PICCS	Y
USA - TSCA	Y
Legend:	Y = All ingredients are on the inventory N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets)

SECTION 16 OTHER INFORMATION

Other information

Ingredients with multiple cas numbers

Name	CAS No
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sodium hydroxide	1310-73-2, 12200-64-5
lithium hydroxide	1310-66-3, 1310-65-2

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

The 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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