
1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

1.1 Product identifier

Product name RAMSET TRAKFAST BATTERY PACK
Synonyms B0092 - PRODUCT CODE • NICKEL CADMIUM BATTERY PACK • RAMSET TRAKFAST BATTERY PACK

1.2 Uses and uses advised against

Uses BATTERIES

1.3 Details of the supplier of the product

Supplier name RAMSETREID NZ (A DIVISION OF ITW NEW ZEALAND)
Address 23-29 Poland Road, Glenfield, Auckland, 0627, NEW ZEALAND
Telephone 0800 88 22 12
Email sales@ramsetreid.co.nz
Website <http://www.reids.co.nz>

1.4 Emergency telephone numbers

Emergency 0800 734 607

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

NON HAZARDOUS ACCORDING TO NZ ENVIRONMENTAL PROTECTION AUTHORITY CRITERIA

2.2 GHS Label elements

No signal word, pictograms, hazard or precautionary statements have been allocated.

2.3 Other hazards

For the battery cell, chemical materials are stored in a hermetically sealed metal case, designed to withstand temperatures and pressures encountered during normal use. As a result, during normal use, there is no physical danger of ignition or explosion and chemical danger of hazardous materials' leakage. However, if exposed to a fire, added mechanical shocks, decomposed, added electric stress by misuse, the gas release vent will be operated. The battery cell case will be breached at the extreme. Hazardous materials may be released. Moreover, if heated strongly by the surrounding fire, acrid or harmful fume may be emitted.

3. COMPOSITION/ INFORMATION ON INGREDIENTS

3.1 Substances / Mixtures

Ingredient	CAS Number	EC Number	Content
ADDITIVE(S)	-	-	Remainder
CADMIUM	7440-43-9	231-152-8	10 to 25%
NICKEL	7440-02-0	231-111-4	10 to 25%
CADMIUM HYDROXIDE	21041-95-2	244-168-5	12 to 23%
IRON	7439-89-6	231-096-4	12 to 13%
NICKEL HYDROXIDE	12054-48-7	235-008-5	5 to 12%

Ingredient Notes The materials contained in this product may only represent a hazard if the integrity of the cell or battery is compromised; physically or electrically abused.

4. FIRST AID MEASURES

PRODUCT NAME **RAMSET TRAKFAST BATTERY PACK**

4.1 Description of first aid measures

Eye	Exposure is considered unlikely unless casing is damaged. Flush gently with running water. Seek medical attention if irritation develops.
Inhalation	Exposure is considered unlikely. Due to product form / nature of use, an inhalation hazard is not anticipated. Also rest and keep warm.
Skin	Exposure is considered unlikely unless casing is damaged. Gently flush affected areas with water. Seek medical attention if irritation develops.
Ingestion	For advice, contact the National Poisons Centre on 0800 764 766 (0800 POISON) or +643 479 7248 or a doctor (at once). If swallowed, do not induce vomiting. Ingestion is considered unlikely due to product form. Rinse mouth out with water and give plenty of water to drink.
First aid facilities	Eye wash facilities and safety shower should be available.

4.2 Most important symptoms and effects, both acute and delayed

Adverse effects not expected from this product. Exposure to battery contents may cause irritation and potential burns.

4.3 Immediate medical attention and special treatment needed

Treat symptomatically.

5. FIRE FIGHTING MEASURES

5.1 Extinguishing media

Use an extinguishing agent suitable for the surrounding fire.

5.2 Special hazards arising from the substance or mixture

Non flammable. May explode if exposed to high temperatures due to pressure build up in battery casing.

5.3 Advice for firefighters

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas. CAUTION: Batteries may explode.

5.4 Hazchem code

2R
2 Fine Water Spray.
R Wear liquid-tight chemical protective clothing and breathing apparatus. Dilute spill and run-off.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear Personal Protective Equipment (PPE) as detailed in section 8 of the SDS.

6.2 Environmental precautions

Prevent product from entering drains and waterways.

6.3 Methods of cleaning up

If battery casing is damaged and contents released, contain spillage, then cover / absorb spill with non-combustible absorbent material (vermiculite, sand, or similar), collect and place in suitable containers for disposal.

6.4 Reference to other sections

See Sections 8 and 13 for exposure controls and disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well ventilated area, removed from incompatible substances and foodstuffs.

7.3 Specific end uses

No information provided.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Exposure standards

Ingredient	Reference	TWA		STEL	
		ppm	mg/m ³	ppm	mg/m ³
Cadmium and compounds (as Cd)	WES [NZ]	--	0.01	--	--
Cadmium and compounds, as Cd	WES [Proposed]	--	0.004	--	--
Cadmium and compounds, as Cd (A2 CARCINOGEN, bio)	WES [NZ]	--	0.002	--	--
Cadmium and compounds, as Cd (respirable)	WES [NZ]	--	0.002	--	--
Iron salts, soluble, as Fe	WES [NZ]	--	1	--	--
Nickel compounds (Respirable dust)	WES [NZ]	--	0.005	--	--
Nickel elemental, metallic or inorganic compounds	WES [NZ]	--	0.02	--	--

Biological limits

Ingredient	Determinant	Sampling Time	BEI
CADMIUM	Cadmium in urine	Not critical	5 µg/g creatinine
	Cadmium in blood	Not critical	5 µg/L
CADMIUM HYDROXIDE	Cadmium in blood	Not critical	5 µg/L
	Cadmium in urine	Not critical	5 µg/g creatinine

Reference: ACGIH Biological Exposure Indices

8.2 Exposure controls

Engineering controls Avoid inhalation. Use in well ventilated areas. Maintain fume levels below the recommended exposure standard.

PPE

Eye / Face	Not required under normal conditions of use.
Hands	Wear PVC or rubber gloves.
Body	Not required under normal conditions of use.
Respiratory	Not required under normal conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	WHITE BATTERY
Odour	ODOURLESS
Flammability	NON FLAMMABLE
Flash point	NOT RELEVANT
Boiling point	NOT AVAILABLE
Melting point	NOT AVAILABLE
Evaporation rate	NOT AVAILABLE
pH	NOT AVAILABLE
Vapour density	NOT AVAILABLE
Relative density	NOT AVAILABLE
Solubility (water)	INSOLUBLE
Vapour pressure	NOT AVAILABLE
Upper explosion limit	NOT RELEVANT
Lower explosion limit	NOT RELEVANT
Partition coefficient	NOT AVAILABLE
Autoignition temperature	NOT AVAILABLE
Decomposition temperature	NOT AVAILABLE
Viscosity	NOT AVAILABLE
Explosive properties	NOT AVAILABLE
Oxidising properties	NOT AVAILABLE
Odour threshold	NOT AVAILABLE

10. STABILITY AND REACTIVITY

10.1 Reactivity

May be corrosive to metals.

10.2 Chemical stability

Stable under recommended conditions of storage.

10.3 Possibility of hazardous reactions

Hazardous polymerisation is not expected to occur.

10.4 Conditions to avoid

Avoid heat, sparks, open flames and other ignition sources.

10.5 Incompatible materials

Battery cell is encased, however contents may be incompatible with oxidising agents (e.g. hypochlorites), acids (e.g. nitric acid), alkalis (e.g. sodium hydroxide), heat and ignition sources.

10.6 Hazardous decomposition products

May evolve toxic gases if heated to decomposition.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity Batteries consist of a hermetically sealed metallic container containing a number of chemicals and materials of construction that may be hazardous upon release. Over exposure considered unlikely unless battery ruptures and contact with contents occurs. Contents may be harmful.

Information available for the ingredients:

Ingredient	Oral LD50	Dermal LD50	Inhalation LC50
CADMIUM	890 mg/kg (mouse)	--	25 mg/m ³ /30M (rat)
NICKEL	> 9000 mg/kg (Sprague-Dawley rat)	--	--
IRON	30000 mg/kg (rat)	--	--
NICKEL HYDROXIDE	1515 mg/kg (rat)	> 2000 mg/kg (rat)	1200 mg/m ³ /4 hours (rat)

Skin Not classified as a skin irritant unless the battery ruptures. Contact with contents may cause irritation, redness, dermatitis and possible burns with prolonged contact.

Eye Not classified as an eye irritant unless the battery ruptures. Contact with contents may cause irritation, redness and possible burns with prolonged contact.

Sensitisation Exposure to contents containing nickel may cause skin sensitisation.

Mutagenicity Cadmium is suspected of causing genetic defects.

Carcinogenicity Cadmium, cadmium compounds, nickel and nickel compounds are classified as carcinogenic to humans (IARC Group 1). However, due to product form, exposure to contents is not anticipated.

Reproductive Cadmium is suspected of damaging fertility or the unborn child.

STOT - single exposure Not classified as causing organ damage from single exposure. Due to the product form and nature of use, exposure to internal contents is not anticipated unless the battery ruptures. Exposure to contents may cause respiratory irritation.

STOT - repeated exposure Due to the product form and nature of use, exposure to internal contents is not anticipated unless the battery ruptures. Repeated exposure to cadmium may result in kidney disease (including proteinuria, a decrease in glomerular filtration rate, and an increased frequency of kidney stone formation) and lung damage (including bronchiolitis and emphysema). Animal studies have also indicated effects on the liver, bone, immune system, blood, and nervous system. Repeated exposure to nickel and its compounds via inhalation may produce respiratory irritation and degeneration in humans (particles under 0.1mm diameter). Prolonged exposure via inhalation to high concentrations may result in lung fibrosis.

Aspiration Not relevant.

12. ECOLOGICAL INFORMATION

PRODUCT NAME RAMSET TRAKFAST BATTERY PACK

12.1 Toxicity

Very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

No information provided.

12.3 Bioaccumulative potential

No information provided.

12.4 Mobility in soil

No information provided.

12.5 Other adverse effects

No information provided.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Waste disposal Reuse or recycle where possible. Return to manufacturer/supplier. Contact the EPA or the manufacturer for additional information.

Legislation Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE: DANGEROUS GOODS 2005; NZS 5433:2012, UN, IMDG OR IATA



	LAND TRANSPORT (NZS 5433)	SEA TRANSPORT (IMDG / IMO)	AIR TRANSPORT (IATA / ICAO)
14.1 UN Number	2795	2795	2795
14.2 Proper Shipping Name	BATTERIES, WET, FILLED WITH ALKALI, electric storage	BATTERIES, WET, FILLED WITH ALKALI, electric storage	BATTERIES, WET, FILLED WITH ALKALI, electric storage
14.3 Transport hazard class	8	8	8
14.4 Packing Group	None allocated.	None allocated.	None allocated.

14.5 Environmental hazards

Marine Pollutant.

14.6 Special precautions for user

Hazchem code 2R

EmS F-A, S-B

15. REGULATORY INFORMATION

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

Approval code MANUFACTURED ARTICLE

Group standard Something for which its intended use is primarily to do with its physical shape, rather than its chemical composition.

Inventory listings **AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals)**
All components are listed on AIIC, or are exempt.

16. OTHER INFORMATION

Additional information

EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: Strenuous work conditions; hot, humid climates; high altitude conditions; extended shifts (which increase the exposure period and shorten the period of recuperation).

WORKPLACE CONTROLS AND PRACTICES: Unless a less toxic chemical can be substituted for a hazardous substance, **ENGINEERING CONTROLS** are the most effective way of reducing exposure. The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release. Isolating operations can also reduce exposure. Using respirators or protective equipment is less effective than the controls mentioned above, but is sometimes necessary.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this report is provided as a guide only. Factors such as form of product, method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: form of product; frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

Abbreviations

ACGIH	American Conference of Governmental Industrial Hygienists
CAS #	Chemical Abstract Service number - used to uniquely identify chemical compounds
CCID	Chemical Classification and Information Database (HSNO)
CNS	Central Nervous System
EC No.	EC No - European Community Number
EMS	Emergency Schedules (Emergency Procedures for Ships Carrying Dangerous Goods)
EPA	Environmental Protection Authority [New Zealand]
GHS	Globally Harmonized System
HSNO	Hazardous Substances and New Organisms
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration, 50% / Median Lethal Concentration
LD50	Lethal Dose, 50% / Median Lethal Dose
mg/m ³	Milligrams per Cubic Metre
OEL	Occupational Exposure Limit
pH	relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm	Parts Per Million
STEL	Short-Term Exposure Limit
STOT-RE	Specific target organ toxicity (repeated exposure)
STOT-SE	Specific target organ toxicity (single exposure)
TLV	Threshold Limit Value
TWA	Time Weighted Average

Report status

This document has been compiled by RMT on behalf of the manufacturer, importer or supplier of the product and serves as their Safety Data Sheet ('SDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer, importer or supplier or obtained from third party sources and is believed to represent the current state of knowledge as to the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from the manufacturer, importer or supplier.

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