

Safety Data Sheet according to WHS Regulations

Date of issue: 28.01.2025

Revision date: 23.01.2025

1 Identification

Product Name: Black Mass Li-NMC Batteries

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use:

Certified Reference Material. For use in evaluating classical wet chemistry and instrumental analytical methods for the chemical analysis of black mass, mixed metal concentrate samples.

Details of Manufacturer or Importer:

Ore Research & Exploration Pty Ltd
37A Hosie Street
Bayswater North VIC 3153

Phone Number: 03 9729 0333

Emergency telephone number: 03 9729 0333

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition), IATA and IMDG/IMSBC.



GHS08 Health hazard

Carcinogenicity – Category 2 H351 Suspected of causing cancer.



GHS07

Skin sensitisation – Category 1 H317 May cause an allergic skin reaction.

Signal Word Warning

Hazard Statements

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

Precautionary Statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P321 Specific treatment (see on this label).

P362+P364 Take off contaminated clothing and wash it before reuse.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

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3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Hazardous Components:

CAS: 346417-97-8	Lithium nickel manganese cobalt oxide	95-100%
	⚠ Carcinogenicity – Category 2, H351; ⚠ Skin sensitisation – Category 1, H317	

4 First Aid Measures

Inhalation: If inhaled, remove to fresh air. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if irritation occurs.

Eye Contact:

In case of eye contact, rinse with water for several minutes, including under eyelids. Remove contact lenses, if present and easy to do. Continue rinsing for at least 15 minutes. Seek medical attention if irritation persists.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Never give anything by mouth to an unconscious person. Seek medical attention if feeling unwell.

Symptoms Caused by Exposure:

Inhalation: May cause respiratory irritation.

Skin Contact: May cause skin irritation. May cause an allergic skin reaction.

Eye Contact: May cause eye irritation.

Ingestion: May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.

5 Fire Fighting Measures

Suitable Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.

Specific Hazards Arising from the Chemical:

No hazardous decomposition products known.

Product is not flammable.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Minimise run-off from fire fighting entering drains or water courses.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved dust/particulate filter respirator and full protective clothing. Evacuate all non-essential personnel from affected area. Do not breathe dust. Ensure adequate ventilation. Avoid generating dust.

Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and sweep granules into a pile and shovel into drums for subsequent disposal. Avoid generating dust. Provide adequate ventilation. Decontaminate spill area with detergent and water.

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always

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wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Protect from direct sunlight. Keep container tightly closed when not in use.

8 Exposure Controls and Personal Protection

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Engineering Controls: Natural ventilation should be adequate under normal use conditions.

Respiratory Protection:

Where an inhalation risk exists, wear approved particulate respirator (filter type P). At high dust levels, wear a powered air purifying respirator (PAPR) with P3 filter or an air-line respirator or a full-face P3 (particulate) respirator. See Australian/New Zealand Standards AS/NZS 1715 and 1716 for more information.

Skin Protection: Skin protection is not required under normal use conditions.

Eye and Face Protection:

Eye and face protectors for protection against dust. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form:	Fine powder
Colour:	Black
Odour:	None
Odour Threshold:	No information available
pH-Value:	Not applicable
Melting point/freezing point:	No information available
Initial Boiling Point/Boiling Range:	No information available
Flash Point:	Not applicable
Flammability	No information available
Auto-ignition Temperature:	No information available
Decomposition Temperature:	No information available
Explosion Limits:	
Lower:	No information available
Upper:	No information available
Vapour Pressure:	Not applicable
Density:	~0.451 g/cm ³
Vapour Density:	Not applicable
Evaporation Rate:	Not applicable
Solubility in Water:	No information available
Partition Coefficient (n-octanol/water):	No information available
Viscosity:	No information available

10 Stability and Reactivity

Possibility of Hazardous Reactions: No dangerous reactions known under conditions of normal use.

Chemical Stability: Stable at ambient temperature and under normal conditions of storage and use.

Conditions to Avoid: No further relevant information available.

Incompatible Materials: No further relevant information available.

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Hazardous Decomposition Products: No hazardous decomposition products known.

11 Toxicological Information

Toxicity:**Acute Health Effects****Inhalation:** May cause respiratory irritation.**Skin:** May cause skin irritation. May cause an allergic skin reaction.**Eye:** May cause eye irritation.**Ingestion:** May cause gastrointestinal irritation, nausea, diarrhoea and vomiting.**Skin Corrosion / Irritation:** Based on classification principles, the classification criteria are not met.**Serious Eye Damage / Irritation:** Based on classification principles, the classification criteria are not met.**Respiratory or Skin Sensitisation:** May cause an allergic skin reaction.**Germ Cell Mutagenicity:** Based on classification principles, the classification criteria are not met.**Carcinogenicity:**

Suspected of causing cancer.

This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.**Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.**Chronic Health Effects:** No data associated with long term health effects.**Existing Conditions Aggravated by Exposure:** No data available.

12 Ecological Information

Ecotoxicity:**Aquatic toxicity:**

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and Degradability: No data available on finished product.**Bioaccumulative Potential:** No data available on finished product.**Mobility in Soil:** No data available on finished product.**Other adverse effects:** No further relevant information available.

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.**Special Precautions for Landfill or Incineration:**

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number Not regulated**Proper Shipping Name** Not regulated

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Dangerous Goods Class Not regulated**Packing Group:** Not regulated

15 Regulatory Information

Australian Inventory of Industrial Chemicals:

All components are on the inventory, or in compliance with the inventory.

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:

Not a scheduled poison.

16 Other Information

Date of Preparation or Last Revision: 23.01.2025**Prepared by:** MSDS.COM.AU Pty Ltdwww.msds.com.au**Abbreviations and acronyms:**

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

CAS: Chemical Abstracts Service (division of the American Chemical Society)

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Skin sensitisation – Category 1: Skin sensitisation, Hazard Category 1

Carcinogenicity – Category 2: Carcinogenicity – Category 2

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document “Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020”.

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