# Material Safety Data Sheet



### KP1406 & KP1408

#### SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION: PRODUCT IDENTIFIER

| PRODUCT NAME    | KP1406 & KP1408 |
|-----------------|-----------------|
| PROPER SHIPPING | Jump Starter    |
| NAME:           |                 |
| OTHER MEANS OF  | EPOWER-240      |
| IDENTIFICATION: |                 |

#### **DETAILS OF MANUFACTURE**

| MANUFACTURE NAME | Shenzhen Carku Technology Co.,Limited                               |
|------------------|---|
| ADDRESS          | No.103, block A, Qixing Creative factory, GaoFeng community, Dalang |
|                  | street, LongHua, Shenzhen.  |
| TEL & FAX. NO    |   |
| OTHER            | Battery Nominal Voltage: 14.8VDC                                    |
|                  | Battery Output: 5VDC 2.4A   |
|                  | Quick Charge: 5VDC 2.4A, 9VDC 2A, 12VDC 1.5A                        |
|                  | USB-C 5VDC 3A, 15VDC 10A  |
|                  | Rated Capacity: 4000mAh, 59.2Wh                                     |
|                  | Battery Weight: 636.1g  |

#### **DETAILS OF SUPPLIER**

| PRODUCT NAME          | Kincrome Australia Pty Ltd  | ABN: 41 007 185 006                                       |
|-----------------------|---|---|
| ADDRESS               | 3 Lakeview Drive Caribbean Busir  | ness Park Scoresby Victoria 3179 AUSTRALIA                |
| CONTACT INFORMATION   | Customer Service: Tel: 130<br>Administration: Tel: +61 3 9730                     | 00 657 528 Fax: 1300 556 005<br>7100 Fax: +61 3 9730 7199 |
| EMERGENCY CONTACT NO. |   |   |
| CONTACT NO.:          | 1300 657 528,<br>If it is an emergency call 000 or<br>POISONS INFORMATION HOTLINE | - 13 11 26  |

#### **SECTION 2 - HAZARDS IDENTIFICATION:**

#### **CLASSIFICATION OF THE SUBSTANCE OR MIXTURE**

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

#### **DETAILS OF SUPPLIER**

| POISONS SCHEDULE   | Not Applicable  |
|--------------------|---|
| CLASSIFICATION [1] | Acute Toxicity (Dermal) Category 4, Skin Corrosion/Irritation Catego-       |
|                    | ry 1A, Serious Eye Damage Category 1, Skin                                  |
|                    | Sensitize Category 1, Carcinogenicity Category 2, Specific target organ     |
|                    | toxicity - single exposure Category 3 (respiratory                          |
|                    | tract irritation), Specific target organ toxicity - repeated exposure Cate- |
|                    | gory 2, Acute Aquatic Hazard Category 2                                     |





| LEGEND:                                  |  |
|--|--|
|  |  |
| HAZARD PICTOGRAM(S                       |  |
| SIGNAL WORD                              | DANGER   |
| SECTION 2 - HAZAR<br>HAZARD STATEMENT(S) | DS IDENTIFICATION (CONT.)_   |
| H312                                     | Harmful in contact with skin.  |
| H314                                     | Causes severe skin burns and eye damage.   |
| H317                                     | May cause an allergic skin reaction.   |
| H351                                     | Suspected of causing cancer.   |
| H335                                     | May cause respiratory irritation.  |
| H373                                     | May cause damage to organs through prolonged or repeated exposure.   |
| H401                                     | Toxic to aquatic life.   |
| PRECAUTIONARY STATE                      | MENT(S) PREVENTION   |
| P201                                     | Obtain special instructions before use.  |
| P260                                     | Do not breathe dust/fume/gas/mist/vapors/spray.  |
| P271                                     | Use only outdoors or in a well-ventilated area.  |
| P280                                     | Wear protective gloves/protective clothing/eye protection/face protection.   |
| PRECAUTIONARY STATE                      | MENT(S) RESPONSE   |
| P301+P330+P331                           | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.   |
| P303+P361+P353                           | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.                       |
| 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.   |
| PRECAUTIONARY STATE                      | MENT(S) STORAGE  |
| P405                                     | Store locked up.   |
| P403+P233                                | Store in a well-ventilated place. Keep container tightly closed.   |
| DDFCALITION A DV CTATE                   |  |

PRECAUTIONARY STATEMENT(S) DISPOSAL

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| F 301  | accordance with any local regulation. |
|--|---------------------------------------|
| SECTION 2 COMPOSITION / INFORMATION ON INCREDIENTS |                                       |

#### SECTION 3 - COMPOSITION / INFORMATION ON INGREDIENTS

#### **SUBSTANCES**

See section below for composition of Mixtures

#### MIXTURES

| CHEMICAL NAME                          | PERCENT OF CONTENT | CAS NO.    |
|--|--------------------|------------|
| Lithium Cobalt Dioxide (LiCoO2)        | 25%~35%            | 12190-79-3 |
| Graphite (C)                           | 15%~20%            | 7782-42-5  |
| Poly Vinylidene<br>Fluoride (PVDF)     | 1%~5%              | 24937-79-9 |
| Acetylene Black (SP)                   | 0.5%~3%            | 1333-86-4  |
| Aluminum(AL)                           | 21%~23%            | 7429-90-5  |
| Copper(Cu)                             | 10%~11%            | 7440-50-8  |
| Lithium hexafluorophosphate<br>(LiPF6) | 10%~15%            | 21324-40-3 |

#### **SECTION 4 - FIRST AID MEASURES**

#### **DESCRIPTION OF FIRST AID MEASURES**

| EYE CONTACT  | <ul> <li>If this product comes in contact with the eyes:</li> <li>Immediately hold eyelids apart and flush the eye continuously with running water.</li> <li>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.</li> <li>Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</li> <li>Transport to hospital or doctor without delay.</li> <li>Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul> |
|--------------|--|
| SKIN CONTACT | <ul> <li>If skin contact occurs:</li> <li>Immediately remove all contaminated clothing, including footwear.</li> <li>Flush skin and hair with running water (and soap if available).</li> <li>Seek medical attention in event of irritation.</li> </ul>  |
| INHALATION   | <ul> <li>If fumes or combustion products are inhaled remove from contaminated area.</li> <li>Lay patient down. Keep warm and rested.</li> <li>Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bagvalve mask device, or pocket mask as trained.</li> <li>Perform CPR if necessary.</li> <li>Transport to hospital, or doctor, without delay.</li> </ul>   |



| INGESTION | <ul> <li>If swallowed do NOT induce vomiting.</li> <li>If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>Observe the patient carefully.</li> <li>Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> </ul> |
|-----------|---|
|           | <ul> <li>ably drink.</li> <li>Seek medical advice.</li> </ul>   |
|           | Avoid giving milk or oils.  |
|           | Avoid giving alcohol.   |
|           | If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their  |
|           | hips to help avoid possible aspiration of vomits.   |

#### INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

Any material aspirated during vomiting may produce lung injury. Therefore vomiting should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours. Treat symptomatically.

To treat poisoning by the higher aliphatic alcohols (up to C7):

- Gastric lavage with copious amounts of water.
- It may be beneficial to instill 60 ml of mineral oil into the stomach.
- Oxygen and artificial respiration as needed.
- Electrolyte balance: it may be useful to start 500 ml. M/6 sodium bicarbonate intravenously but maintain a cautious and conservative attitude toward electrolyte replacement unless shock or severe acidosis threatens.
- To protect the liver, maintain carbohydrate intake by intravenous infusions of glucose.
- Haemodialysis if coma is deep and persistent. [GOSSELIN, SMITH HODGE: Clinical Toxicology of Commercial Products, Ed 5)

#### **OTHER**

Establish a patent airway with suction where necessary.

Watch for signs of respiratory insufficiency and assist ventilation as necessary.

Administer oxygen by non-rebreather mask at 10 to 15 l/min.

Monitor and treat, where necessary, for shock.

Monitor and treat, where necessary, for pulmonary oedema.

Anticipate and treat, where necessary, for seizures.

DO NOT use emetics. Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong

gag reflex and does not drool.

Give activated charcoal.

#### Danger sort: N/A

Routes of entry:

- 1. Eyes and Skin-When leaking, the electrolyte solution contained in the battery irritates to ocular tissues and the skin.
- 2. Inhalation-Respiratory (and eye) irritation may occur if fumes are released due heat or an abundance of leaking batteries.

3. Ingestion -The ingestion of the battery can be harmful. Content of open battery can cause serious chemical burns of mouth, esophagus and gastrointestinal tract.

#### Health harm:

Exposure to leaking electrolyte from ruptured or leaking battery can cause:

- 1. Inhalation-Burns and irritation of the respiratory system, coughing, wheezing, and shortness of breath.
- 2. Eyes-Redness, tearing, burns. The electrolyte is corrosive to all ocular tissues.
- 3. Skin-The electrolyte is corrosive and causes skin irritation and burns.
- 4. Ingestion-The electrolyte solution causes tissue damage to throat and gastrointestinal track.

Environment harm: Not necessary under conditions of normal use.

Explosion danger: The battery may be explosive at high temperature (above 150°C) or exposing to the fire.

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#### **SECTION 5 - FIREFIGHTING MEASURES**

#### **EXTINGUISHING MEDIA**

At temperatures above 1500 C, carbon, graphite or graphene reacts with substances containing oxygen, including water and carbon dioxide. In case of intensely hot fires sand should be used to cover and isolate these materials. DO NOT use halogenated fire extinguishing agents.

#### SPECIAL HAZARDS ARISING FROM THE SUBSTRATE OR MIXTURE

| FIRE INCOMPATIBILITY     | Reacts with acids producing flammable / explosive hydrogen (H2) gas<br>Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleach-<br>es, pool chlorine etc. as ignition may result Keep dry<br>NOTE: May develop pressure in containers; open carefully. Vent periodically.  |  |
|--------------------------|--|--|
| ADVICE FOR FIREFIGHTERS  |  |  |
| FIRE FIGHTING            | <ul> <li>Alert Fire Brigade and tell them location and nature of hazard.</li> <li>Wear breathing apparatus plus protective gloves in the event of a fire.</li> <li>Prevent, by any means available, spillage from entering drains or water courses.</li> <li>Use fire fighting procedures suitable for surrounding area.</li> <li>Slight hazard when exposed to heat, flame and oxidizers.</li> </ul>  |  |
| FIRE/EXPLOSION<br>HAZARD | <ul> <li>Articles and manufactured articles may constitute a fire hazard where polymers form<br/>their outer layers or where combustible packaging remains in place.</li> <li>Certain substances, found throughout their construction, may degrade or become<br/>volatile when heated to high temperatures. This may create a secondary hazard.</li> <li>carbon dioxide (CO2) hydrogen fluoride phosphorus oxides (POx) metal oxides</li> <li>other pyrolysis products typical of burning organic material.</li> </ul> |  |
| HAZCHEM                  | • 4W   |  |

#### **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> <li>Clean up all spills immediately.</li> <li>Secure load if safe to do so.</li> <li>Bundle/collect recoverable product.</li> <li>Collect remaining material in containers with covers for disposal.</li> </ul> |
|--------------|--|
| MAJOR SPILLS | <ul> <li>Clean up all spills immediately.</li> <li>Wear protective clothing, safety glasses, dust mask, gloves.</li> <li>Secure load if safe to do so. Bundle/collect recoverable product.</li> </ul>                |

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



#### SECTION 7 HANDLING AND STORAGE PRECAUTIONS FOR SAFE HANDLING

| SAFE HANDLING                            | <ol> <li>Batteries are designed to be recharged. However, improperly charging a battery may cause<br/>the battery to flame. When charging the battery, use dedicated chargers and follow the spec-<br/>ified conditions.</li> <li>Never disassemble or modify a battery.</li> <li>Do not immerse, throw, and wet a battery in water.</li> <li>Should a battery unintentionally be crushed, thus releasing its contents, rubber gloves<br/>must be used to handle all battery components. Avoid the inhalation of any vapors that<br/>may be emitted.</li> <li>Short circuit causes heating. In addition, short circuit reduces the life of the battery and can<br/>lead to ignition of surrounding materials. Physical contact with to short-circuited battery can<br/>cause skin burn.</li> <li>Avoid reversing the battery polarity, which can cause the battery to be damaged or flame.</li> <li>In the event of skin or eye exposure to the electrolyte, refer to Section 4, First Aid Measures.</li> </ol> |
|--|---|
| SUITABLE<br>CONTAINER                    | <ul> <li>Generally packaging as originally supplied with the article or manufactured item is sufficient to protect against physical hazards.</li> <li>If repackaging is required ensure the article is intact and does not show signs of wear. As far as is practicably possible, reuse the original packaging or something providing a similar level of protection to both the article and the handler.</li> <li>Lined metal can, lined metal pail/ can.</li> <li>Plastic bucket.</li> <li>Poly liner Steel drum.</li> <li>Packing as recommended by manufacturer.</li> </ul>  |
| STORAGE<br>INCOMPATIBILITY               | <ul> <li>Segregate from alcohol, water.</li> <li>NOTE: May develop pressure in containers; open carefully. Vent periodically.</li> <li>Keep dry</li> <li>Avoid reaction with oxidizing agents</li> <li>Avoid strong acids, bases.</li> </ul>  |
|  | X - Must not be stored together<br>0 - May be stored together<br>+ - May be stored together   |
| SECTION 8 EXPO                           | SURE CONTROLS / PERSONAL PROTECTION   |
| EXPOSURE CONTRO                          | ERS- OCCUPATIONAL EXPOSORE LIMITS (UEL) INGREDIENT DATA   |
| APPROPRIATE<br>ENGINEERING CON-<br>TROLS | <ul> <li>None under normal operating conditions.</li> <li>Articles or manufactured items, in their original condition, generally don't require engineering controls during handling or in normal use.</li> </ul>  |

• Exceptions may arise following extensive use and subsequent wear, during recycling or disposal operations where substances, found in the article, may be released to the environment.

**PERSONAL PROTECTION** 

**KINCROME** 



| EYE AND FACE<br>PROTECTION | <ul> <li>No special equipment required due to the physical form of the product.<br/>Safety glasses with side shields.</li> <li>Chemical goggles.</li> <li>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. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience.</li> </ul> |
|----------------------------|--|
| SKIN PROTECTION            | See Hand protection below  |
| HANDS/FEET PROTEC-<br>TION | <ul> <li>No special equipment required due to the physical form of the product.</li> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> </ul>   |
| BODY PROTECTION            | <ul> <li>Not necessary under conditions of normal use. Use rubber apron and protective<br/>working in case of handling a leaking of ruptured battery</li> </ul>  |
| OTHER PROTECTION           | Use good chemical hygiene practice. Wash hands thoroughly after<br>Cleaning-up a battery spill caused by leaking battery. No eating, drinking, or smoking in<br>battery storage area.  |

#### **PROTECTION OF HANDS:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

| MATERIAL         | KPI |
|------------------|-----|
| NEOPRENE         | A   |
| NEOPRENE/NATURAL | A   |
| NITRILE          | A   |
| NITRILE+PVC      | A   |
| TEFLON           | A   |
| VITON            | A   |
| NATURAL RUBBER   | A   |
| NATURAL+NEOPRENE | В   |
| PVC              | В   |

\* KPI - Kincrome 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**

Type A Filter of sufficient capacity (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent). Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter. Respiratory protection not normally required due to the physical form of the product.





#### **SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES APPEARANCE

**APPEARANCE** Solid **ODOUR** Not Available **ODOUR THRESHOLD** Not Available PH (AS SUPPLIED) Not Applicable **MELTING POINT / FREEZING POINT (°C)** Not Applicable **INITIAL BOILING POINT AND BOILING RANGE (°C)** Not Applicable FLASH POINT (°C) Not Applicable Not Applicable **EVAPORATION RATE** FLAMMABILITY Not Applicable Not Applicable **UPPER EXPLOSIVE LIMIT (%)** LOWER EXPLOSIVE LIMIT (%) Not Applicable Not Applicable VAPOR PRESSURE (KPA) SOLUBILITY IN WATER Insoluble VAPOR DENSITY (AIR = 1) Not Applicable **RELATIVE DENSITY (WATER = 1)** Not Applicable PARTITION COEFFICIENT N-OCTANOL / WATER Not Available **AUTO-IGNITION TEMPERATURE (°C)** Not Applicable **DECOMPOSITION TEMPERATURE** Not Applicable VISCOSITY (CST) Not Applicable **MOLECULAR WEIGHT (G/MOL)** Not Applicable TASTE Not Available Not Available **EXPLOSIVE PROPERTIES** Not Available **OXIDIZING PROPERTIES** SURFACE TENSION (DYN/CM OR MN/M) Not Applicable **VOLATILE COMPONENT (%VOL)** Not Applicable GAS GROUP Not Available PH AS A SOLUTION (1%) Not Applicable VOC G/L Not Applicable



#### **SECTION 10: STABILITY AND REACTIVITY**

| REACTIVITY:                            | Stable under recommended storage conditions   |
|--|---|
| CHEMICAL STABILITY:                    | Stable under recommended storage conditions.  |
| POSSIBILITY OF HAZARDOUS<br>REACTIONS: | Hazardous polymerization will not occur.  |
| CONDITIONS TO AVOID:                   | Do not heat, throw into fire, disassemble, short circuit, im-<br>merse in water or overcharge, etc. |
| INCOMPATIBLE MATERIALS:                | None during normal operation. Avoid exposure heat, open flame and corrosives.                       |
| HAZARDOUS<br>DECOMPOSITION PRODUCTS:   | The battery may release irritative gas once the electrolyte leakage.                                |

#### **SECTION 11 TOXICOLOGICAL INFORMATION**

The battery does not elicit toxicological properties during routine handling and use. If the battery is opened through misuse or damage, discard immediately. Internal components of cell are irritant and sensitization.

| IRRITANT:                     | The electrolytes contained in this battery can irritate eyes<br>with any contact. Prolonged contact with the skin or mucous<br>membranes may cause irritation. |
|-------------------------------|--|
| SENSITIZATION:                | No information is available.   |
| TERATOGENIC:                  | No information is available.   |
| CARCINOGENICITY:              | No information is available.   |
| MUTAGENICITY:                 | No information is available.   |
| <b>REPRODUCTIVE TOXICITY:</b> | No information is available.   |

#### **SECTION 12: ECOLOGICAL INFORMATION**

THE INFORMATION GIVEN IS BASED ON DATA AVAILABLE FOR THE MATERIAL, THE COMPONENTS OF THE MATERIAL, AND SIMILAR MATERIALS.

| ECOTOXICITY                   | Not expected to be harmful to aquatic organisms.<br>Not expected to demonstrate chronic toxicity to aquatic organisms. |
|-------------------------------|--|
| PERSISTENCE AND DEGRADABILITY |  |
| BIO-DEGRADATION:              | Expected to be readily biodegradable   |
| HYDROLYSIS                    | Transformation due to hydrolysis not expected to be significant.   |
| PHOTOLYSIS:                   | Transformation due to photolysis not expected to be significant.   |
| ATMOSPHERIC OXIDATION::       | Expected to degrade rapidly in air   |
| OTHER ECOLOGICAL INFORMATION  |  |

#### **ECOLOGICAL DATA**

1. When properly used and disposed, the battery does not present environmental hazard.

2. The battery does not contain mercury, cadmium, or lead.

3. Do not let internal components enter marine environment. Avoid releasing to water ways, wastewater or ground water.





#### **SECTION 13: DISPOSAL CONSIDERATIONS**

Disposal recommendations based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

**DISPOSAL RECOMMENDATIONS** Product is suitable for burning in an enclosed controlled burner for fuel value or disposal by supervised incineration at very high temperatures to prevent formation of undesirable combustion products. **REGULATORY DISPOSAL INFORMATION** RCRA Information: The unused product, in our opinion, is not specifically listed by the EPA as a hazardous waste (40 CFR, Part 261D), nor is it formulated to contain materials which are listed as hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, oversensitivity or reactivity and is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure (TCLP). However, used product may be regulated. Empty Container Warning Empty Container Warning (where applicable): Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. Do NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

#### **SECTION 14: TRANSPORT INFORMATION**

According to PACKING INSTRUCTION 965 - 966 of IATA DGR 63rd Edition for transportation, the special provision 188 of IMDG (inc Amdt 40-20). The batteries should be securely packed and protected against short-circuits. Examine whether the package of the containers are integrate and tighten closed before transport. Take in a cargo of them without falling, dropping, and breakage. Prevent collapse of cargo piles. Don't put the goods together with oxidizer and chief food chemicals. The transport vehicle and ship should be cleaned and sterilized before transport. During transport, the vehicle should prevent exposure, rain and high temperature. For stopovers, the vehicle should be away from fire and heat sources. When transported by sea, the assemble place should keep away from bedroom and kitchen, and isolated from the engine room, power and fire source. Under the condition of Road Transportation, the driver should drive in accordance with regulated route, don't stop over in the residential area and congested area.

#### LABELS REQUIRED

MARINE POLLUTANT HAZCHEM UN-NUMBER ADR/RID/ADN, IMDG, IATA UN PROPER SHIPPING NAME ADR/RID/ADN, IMDG, IATA

TRANSPORT HAZARD CLASS(ES) ADR/RID/ADN, IMDG, IATA

# UN 3481 For more information, call

NO

4W

3480 & 3481

LITHIUM ION BATTERIES (including lithium ion polymer batteries) or; LITHIUM ION BATTERIES CONTAINED IN EQUIPMENT or LITHIUM ION BATTERIES PACKED WITH EQUIPMENT (including lithium ion polymer batteries)

Not Regulated





#### **CLASS & LABEL**



**PACKING GROUP** ADR/RID/ADN, IMDG, IATA **ENVIRONMENTAL HAZARDS OTHER** 

Not Applicable

Not Applicable Special provisions: Limited quantity: Packing Instruction (if applicable):

188 230 310 348 376 377 384 387 Not Applicable 965 18, 966 II

#### SECTION 15: REGULATORY INFORMATION

The transport of rechargeable lithium-ion batteries regulated by the united nations as detailed in the "model Regulations on the transport of dangerous Goods Ref. ST/SG/ AC.10/1 Revision 22 2021".

Defined by UN in the "Recommendations on the transport of Dangerous Goods Chapter 38.3 Manual of Tests and Criteria Ref. ST/SG/AC.10/11 Rev.7/Amend .1 2021". The Lithium-ion Cells and the battery Packs may or may not be assigned to the UN No. 3480 Class-9 that is restricted for transport.

Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List

Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes

Australia Inventory of Chemical Substances (AICS)

International Air Transport Association (IATA)

Dangerous Goods Regulations International Maritime Dangerous Goods Reguirements (IMDG Code)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations (English) Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australia Dangerous Goods Code (ADG Code) - Goods Too Dangerous To Be Transported Australia Exposure Standards Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemical

#### **SECTION 16: OTHER INFORMATION**

CHEMICAL EMERGENCIES: 1 800 033 111 **DISCLAIMER OF LIABILITY** 

#### **OTHER INFORMATION:**

It is believed that the information given in this bulletin is accurate at the issue date. It is offered in good faith, but without guarantee and without acceptance of responsibility for its accuracy.

Kincrome a policy of ongoing research and development aimed at product improvement and therefore may change the formulation, specification and characteristics of its products without notice.

It is the user's responsibility to verify the current formulation, specification or characteristics of a product, and to ascertain that it is suitable for an intended use or application

PLEASE NOTE that although every care has been taken in compiling the above information, it is solely reliant upon data available to us at the date hereof.

We believe the data to be correct, however for the reason just stated we are not in a position to warrant its accuracy. With that in mind and given that the full range of possibilities and conditions under which the information may be applied simply cannot be anticipated, YOU ARE CAUTIONED to make your own determinations as to the veracity and the suitability of the information to the particular circumstances that apply, or may apply, to you from time to time.

Consistent with that approach it is recommended that where you have a particular purpose which would necessitate a reliance on information of the nature herein you obtain your own independent expert advice particularly structured to the relevant purpose. If this material is printed, circulated, distributed or copied in any manner, it is not to be modified without prior written permission, and further, it is to include





#### the wording of the above disclaimer. ABBREVIATIONS AND ACRONYMS:

| ADR:  | A European Agreement concerning the International Carriage of Dangerous Goods by Road  |
|-------|--|
| IMDG: | International Maritime Code for Dangerous Goods IATA: International Air Transport Association  |
| GHS:  | Globally Harmonized System of Classification and Labeling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances ELINCS: European List of Notified Chemical Substances |
| CAS:  | Chemical Abstracts Service (division of the American Chemical Society) DNEL: Derived No-Effect Level (REACH)   |
| ADG   | Australia Dangerous Goods  |
| AICS  | Australia Inventory of Chemical Substances   |
| HCIS  | Hazardous Chemical Information System  |
|       |  |
|       |  |
|       |  |

This MSDS has been prepared by Kincrome Australia Pty. Ltd. on behalf of its client.



