



GUIDELINES FOR THE SAFE COLLECTING, PACKING AND TRANSPORTING OF MOBILE PHONE COMPONENTS

INTRODUCTION

These guidelines have been prepared for MobileMuster collection points that collect mobile phone components including handsets, their batteries; chargers and accessories.

BACKGROUND

MobileMuster is the official recycling program of the mobile phone industry, accredited by the Government under the Product Stewardship Act 2011. The program is managed by the Australian Telecommunications Association (AMTA). MobileMuster is a free service that accepts all mobile phone brands, chargers and accessories for recycling including mobile phone batteries (i.e. Lithiumion, Lithium polymer, Nickel metal hydride (NiMH), Nickel cadmium (NiCd) and lead acid batteries).

All registered collection points must comply with MobileMuster's Terms and Conditions these can be viewed by visiting www.mobilemuster.com.au/terms-and-conditions/

OWNERSHIP OF MOBILE PHONE COMPONENTS

All mobile phone components placed in a MobileMuster collection unit/s become the property of AMTA. You must not collect mobile components on behalf of AMTA for any purpose other than recycling. All mobile components collected must not be reused, resold or removed from the collection unit.

You must inform AMTA and the police immediately if someone other than AMTA's approved courier removes or attempts to remove any mobile components collected on behalf of AMTA. AMTA will treat any unauthorised removal of mobile phone components as theft.































COLLECTION

All collection units must be

- secured to prevent unauthorised access, theft or vandalism, including unauthorised access by staff or customers
- placed in a secure/supervised location where someone can keep an eye on it at all times,
- is accessible by the public (if listed as a public drop-off point) and/or your staff
- is protected from exposure to the elements,
- · does not present a tripping hazard or obstruction, and
- out of reach of children

In particular do not place your collection unit:

- near an exit
- near a heat source (e.g. in the sun, near an oven)
- near corrosive chemicals, food or produce
- outside (unless it is waterproof) or in a humid area
- in an unsupervised area

When collecting mobile phones, batteries and accessories it is important to ensure that:

- wherever possible the battery remains in the handset,
- non mobile phone items (e.g. other electronic equipment) are not put into the collection
 unit and are recycled through other collection channels such as TechCollect or Drop Zone
 for televisions and computer equipment; Aldi or Battery World for household batteries. Go
 to recyclingnearyou.com.au to find your nearest recycling location details
- the points on any loose batteries are either taped or wrapped to prevent contact with other batteries.

Collection sites must comply with the requirements of all relevant codes, regulations, rules and industry practice in relation to safety. An effective occupational health and safety policy must be in place.

Do not store mobile phone components including batteries in a metal container without a plastic lining (to avoid the risk of short circuits).































We recommend you

- nominate people responsible for the MobileMuster recycling
- document the procedure
- inspect the collection unit daily for the presence of any liquid, heat or smoke and remove any rubbish,
- have appropriate firefighting equipment on site

See below for more details on the safe handling of batteries.

PACKING

- Before booking a free courier collection transfer the components from your MobileMuster collection unit into a sturdy box or MobileMuster branded green bag (if provided) ensuring it is taped up securely for transporting,
- Wear gloves when handling mobile phone components, especially batteries that are leaking as they can cause skin irritation and burning, and wash your hands after handling any components,
- Wherever possible keep the battery in the handset, where there are loose batteries ensure they are separated so points aren't touching (i.e. taped or wrapped),
- Batteries must be packed in inner packagings that completely enclose the battery; batteries
 must be protected so as to prevent short circuits. We recommend top to tail then and
 rubber banding them together and then placing in a plastic bag to reduce the risk of
 terminals touching
- Ensure any empty space in the packaging is filled with cushioning material (this is not required if you are using a MobileMuster branded green bag.)
- Do not crush, compact or disassemble the batteries,
- Do not pack your pick-up greater than 15 kilograms per box
- If you are shipping larger collections the total weight of lithium batteries per transport unit must not exceed 333kg and the total weight of each container must not exceed 400kg
- Packages must be marked with the caution label, this will be email to you once the booking has been confirmed.
- Anytime a staff member feels sick or has itchy eyes from handling batteries they are to stop immediately and see their supervisor (see also First Aid below),
- If batteries are damaged and/or leaking they are to be separated from the other mobile phone components and put into a thick plastic zip-lock bag to prevent the liquid and gas escaping and disposed of,
- Adopt safe lifting techniques































CAUTION!

Lithium-ion Batteries

DO NOT LOAD OR TRANSPORT

PACKING INSTRUCTION

This packing instruction applies to UN Nos. 3090, 3091, 3480 and 3481 transported for disposal or recycling, either packed together with or packed without non-lithium batteries:

Additional requirements:

- Cells and batteries must be designed or packed to prevent short circuits and the dangerous evolution
 of heat.
- 2. Protection against short circuits and the dangerous evolution of heat includes, but is not limited to,
 - individual protection of the battery terminals.
 - inner packaging to prevent contact between cells and batteries,
 - batteries with recessed terminals designed to protect against short circuits, or
 - the use of a non-conductive and non-combustible cushioning material to fill empty space between the cells or batteries in the packaging.
- Cells and batteries must be secured within the outer packaging to prevent excessive movement during transport (e.g. by using a non-combustible and non-conductive cushioning material or through the use of a tightly closed plastics bag).

TRANSPORT

- Once your components are packed you can book a free MobileMuster pickup by calling 1800 249 113 or online at www.mobilemuster.com.au
- You will be provided with a Case ID and emailed a Senders Shipping Notification (SSN) after booking (that includes a "Lithium Ion Caution Notice"). Please write the case id on the box(es)/bag(s) and attach the SSN securely to each box being collected.
- Your collection can only be picked up by a courier who has the correct Case ID written on a consignment note.
- Contact the police and MobileMuster immediately if any person without this Case ID attempts to remove your collection or collection unit.
- Avoid vibrations and micro-movements caused by transportation, machines, fork-lift etc as they increase the risk of short circuits

SAFE HANDLING OF BATTERIES

Most mobile phone batteries do not present a risk to health and safety if handled correctly. However, batteries do fall under the Australian Dangerous Goods Code and must be stored and transported in a secure, safe and environmentally controlled manner.

































Used batteries may still retain a charge, so there is the potential for unplanned discharge. All batteries should be treated as holding a charge and stored and handled with care. Unplanned discharges may result in injury or damage to property. Some types of batteries are small enough to be ingested by children and as such should be stored in safe place away from the reach of children. If ingested contact the Poisons hotline on 13 11 26.

There are three main types of mobile phone batteries *Lithium Ion* (Li-Ion) (this is the primary one), *Nickel Cadmium* (NiCad) and *Nickel–Metal Hydride* (NiMH).

The following general common sense, guidelines should be applied to minimise the potential risks associated with the handling of mobile phone batteries.

We recommend wherever possible that the battery should be kept within the mobile phone when placed in the MobileMuster collection unit or transported.

If there are any loose batteries in your collection, each must be individually wrapped, tapped or packed in a way to prevent contact and sparking.

Do not deliberately break open lithium batteries as lithium is a reactive metal and if exposed to humid air may react and spontaneously catch on fire. Care needs to be taken to avoid physical damage to the batteries.

Exemptions do apply for the transportation of large quantities of batteries. Please see the below exemptions and contact MobileMuster on 1300 730 070 for further instructions.

Damaged or leaking batteries

If the batteries are leaking or damaged place them in a clear plastic bag and take them to a waste management centre or hazardous household waste collection point for disposal.

DO NOT handle them without protection such as gloves.































FIRE HAZARD REDUCTION

If a fire does occur the following measures are to be taken:

Battery Type	Fire Extinguisher Type	Risks
Li-lon#	CO2 / Foam / Dry Chemical / Water	Toxic and Corrosive fumes
Ni-Cad [#]	All extinguishers acceptable	Cadmium fumes
NiMH [#]	All extinguishers acceptable	Toxic and Corrosive fumes
Alkaline	All extinguishers acceptable	Rupturing of cells under heat
Lead Acid	Only CO2 / Foam / Dry Chemical Hydrogen gas highly flammable	

[#] Most Mobile phone batteries are these types

FIRST AID

Information for all battery types:

1. Ingestion:

- a. Sulfuric Acid: Give large quantities of water; do not induce vomiting; seek medical attention.
- b. Lead: Consult physician immediately.

2. Inhalation:

- a. *Sulfuric Acid:* Remove to fresh air immediately. If breathing is difficult, give oxygen. Seek medical attention.
- b. Lead: Remove from exposure, gargle, wash nose and lips; consult physician.

3. Skin Contact:

- a. *Sulfuric Acid:* Flush with large amounts of soap and water for at least 15 minutes; remove contaminated clothing completely, including shoes. If a chemical burn occurs or if irritation persists, seek medical attention
- b. Lead: Wash immediately with soap and water.

4. Eye Contact:

a. *Sulfuric Acid* and *Lead*: Flush immediately with large amounts of water for at least 15 minutes, lifting upper and lower lids, until no evidence of the chemical remains. Seek medical attention.

































EXEMPTIONS FOR THE TRANSPORTATION OF LARGE QUANTITIES OF BATTERIES

Under the Dangerous Goods Exemption Order 010/12, batteries sent in for recycling do not need to be individually protected against short circuit as long as the packaging and transport requirements in the exemption are met. They must be packed according to SP 636 (b) and P903b:

- each battery must not weigh more than 500g
- the total weight of lithium batteries must not exceed 333kg
- the maximum weight of each package must not exceed 400kg
- the packages must bear the inscription 'USED LITHIUM CELLS'
- the packaging must conform to the packaging group II performance level, and can only be:
 - 1H2 vented plastic drum with a removable head <5 years old, or
 - 4H2 plastic box of adequate strength and resistance to degrading, and with a closure that cannot unintentionally open, or
 - 1A2 steel drum with removable head or 4A steel box fitted with a polyethylene bag that:
 - has impact resistance of at least 48og in both parallel and perpendicular planes along the length of the bag
 - has >500 microns of thickness, electrical resistivity of >10 Mohms, and water absorption rate over 24hrs at 2°C lower than 0.01%
 - shall be closed
 - used only once
 - empty space in the packaging must be fitted with cushioning material, unless a polyethylene bag is used according to the above specifications.

All single and outer packaging used for waste batteries must be vented in accordance with clause 4.1.1.8 of the ADG Code.

Note: MobileMuster and AMTA do not accept liability to any person or organisation for the advice provided in this document or incorporated into it and it should be used only as a guide and reference tool. Readers need to seek their own independent legal advice.

SOURCES / REFERENCES

Australian Battery Recycling Initiative (ABRI), www.batteryrecycling.org.au
Battery Back (UK), www.batteryback.org/health-and-safety.html
International Marine Dangerous Goods (IMDG) Code, www.imo.org/Publications/IMDGCode
Australian Dangerous Goods (ADG) Code, 7th Ed, www.ntc.gov.au
Battery Back (Victoria), www.resourcesmart.vic.gov.au/for_households_3797.html
Battery World Australia (Locations), www.batteryworld.com.au/store-list
Other Collection Locations, www.recyclingnearyou.com.au

























