

Waste battery service & storage guidance

The Recolight battery recycling service is for portable and industrial batteries.

Recolight require users of its battery collection service to follow current guidance and best practise relating to the safe storage and handling of batteries. This document provides practical guidance and links to the official Health & Safety Executive (HSE) guidance.

The Recolight battery collection service

The maximum gross weight of mixed batteries that can be collected by Recolight is 333kg per collection. This weight includes containers and any inert filling used.

Please advise Recolight if your collection might exceed 333kg so that a solution can be considered, e.g. using specialist hauliers or splitting into multiple collections.

Recolight DO NOT collect the following:

- ✘ Batteries containing potassium hydroxide
- ✘ Batteries that require 'activation' (e.g. by adding a liquid before use) to allow them to function
- ✘ Damaged batteries
- ✘ Batteries with exposed terminals

By accepting delivery of a battery container, you thereby acknowledge you have read, understood & comply with our battery guidance for safe waste battery storage and collection.

Recolight containers		Dimensions	Storage
<p>Battery Drum</p>	<p>Dimensions</p> <p>height 520mm</p> <p>Diameter 249mm at neck</p> <p>Capacity - 30 litres</p> <p>Material</p> <p>High Density Polyethylene</p> <p>Metal lever locking ring</p>	<p>Storage</p> <p>For mixed portable batteries</p> <p>UN approved for lithium 1H2/X61/S</p>	
	<p>Battery Box</p>	<p>Dimensions</p> <p>length 1200mm</p> <p>width 1000mm</p> <p>height 740mm</p> <p>Capacity - 605 litres</p> <p>Material</p> <p>High Density Polyethylene</p>	<p>Storage</p> <p>For mixed batteries</p> <p>NO lithium</p> <p>Secure lid to keep batteries dry</p>

Batteries must be handled with great care

Batteries are usually safe to store and handle provided

- they have not been exposed to physical or electrical abuse,
- and are treated with appropriate respect.

However, batteries do pose several serious risks including fire, explosion, chemical and heat burns, poisoning, serious electric shock and dangers from heavy weight.

If you store or handle batteries it's important that you take reasonable steps to minimise risk.

Caring for waste batteries to prevent short circuit



- ✓ Securely cover all bare terminals with insulating tape



- ✓ Cut off bare wires
- ✓ Securely cover exposed ends with insulating tape



The risks of short-circuit & fire

There is substantial risk of a battery fire from short-circuit if the batteries are not fully discharged, often the case with waste batteries.

- A battery fire has the greatest potential when relatively high energy is passed through conductors during a short circuit, generating high temperatures.
- Electrical conductors can spontaneously combust when touched together (short-circuited), which can lead to a battery fire.
- Ruptured or damaged batteries can leak electrolyte which can be hazardous and in some instances a ruptured battery can catch fire (e.g. primary lithium batteries).
- Lithium batteries are particularly hazardous due to their ability to retain their electrical capacity for long periods and because they contain elemental lithium.
- Rupturing / short-circuits / physical damage can lead to explosion or high temperature fires.
- Risk can be increased when batteries are disturbed or moved. Movement may cause a short circuit to take place or cause physical damage or rupture to a battery.
- The dangers from batteries can take some time to become apparent – for example heat from a short circuit or damaged battery can build up slowly over time and only several hours later cause a fire to start. Be vigilant, especially with batteries that have recently been moved or disturbed in some way.
- Because batteries are a potential source of heat, it makes sense to starve them of fuel and oxygen in order to minimise the risk of fire. Keep batteries in sealed containers to keep them free of oxygen supply and water.

Correct storage and handling of batteries will minimise risk

Storage & handling guidelines

- ✓ **Effectively insulate and protect** all live conductors and terminals.
- ✓ **Cut off trailing wires** and secure their ends by taping them up with insulation tape, or otherwise have their live ends protected to ensure that even during movement, there is no possibility of live terminals being exposed and creating risks from short circuit or electric shock.
- ✓ **WET CELL batteries** such as wet cell Nicads are exempt from ADR regulations ref SP 598.
 - Cases must be undamaged
 - Secured in the Dolav so that they cannot move/become damaged in transit
 - **Do not mix** wet cell batteries with dry cell batteries.
- ✓ **Metal strapping around batteries should only be used with caution** and in such a way that the metal could not give rise to a short circuit and resulting potential fire.
- ✓ **Battery containers and lining bags must be kept tightly closed** to remove the supply of oxygen from the container and reduce fire risk.
- ✓ **Batteries must always be protected from rain and any other sources of water.** Water presence could corrode battery casings giving rise to leakage and fire/explosion risk.
- ✓ **For higher risk batteries, pack with an inert filling material** (e.g. sand)– this will help reduce risk of short circuit, conduct heat away, and starve oxygen and fuel. Keep containers of waste batteries in an area away from combustible materials to avoid risk of fire spreading.
- ✓ Where the batteries cannot be stored or transported in appropriate containers, please speak with a member of staff from Recolight who can agree an acceptable and appropriate alternative means of transporting the batteries with minimum risk.
- ✓ **Train all staff on the risks associated with storing and handling batteries.** Make sure they are aware of what to do in the event of an incident.

Health and Safety Executive (H&SE)

To learn more about the risks associated with batteries refer to guidance issued by H&SE.

LINKS > [Using electric storage batteries safely](#) – H&SE download

[Health & Safety Executive website](#)

Disclaimer

This information is offered as guidance. It is your responsibility to ensure that correct procedures are in place. Recolight accept no legal responsibility for any errors, omissions or misleading statements.