

# ERP UK Battery Box Risk Assessment

Assessment Ref no:	RA.UK.009		
Assessed By:	Steve Smith	Approved By:	Kamila Horak
Review Date	19/12/2016	Date	22/12/2016

## RISK ASSESSMENT SUMMARY

**Description:** This Risk Assessment considers the hazards and risks involved with the collecting, handling and storage of waste portable batteries under the Waste Batteries and Accumulators Regulations 2009 in relation to a potentially full box of batteries (Approx. 25Kg Max) that will be sent to a processor for recycling.

**Location:** Publicly accessible buildings; libraries, schools, leisure centres, council offices, retail shops, etc

**Personnel at Risk:** Customers, employees, neighbours, children, elderly



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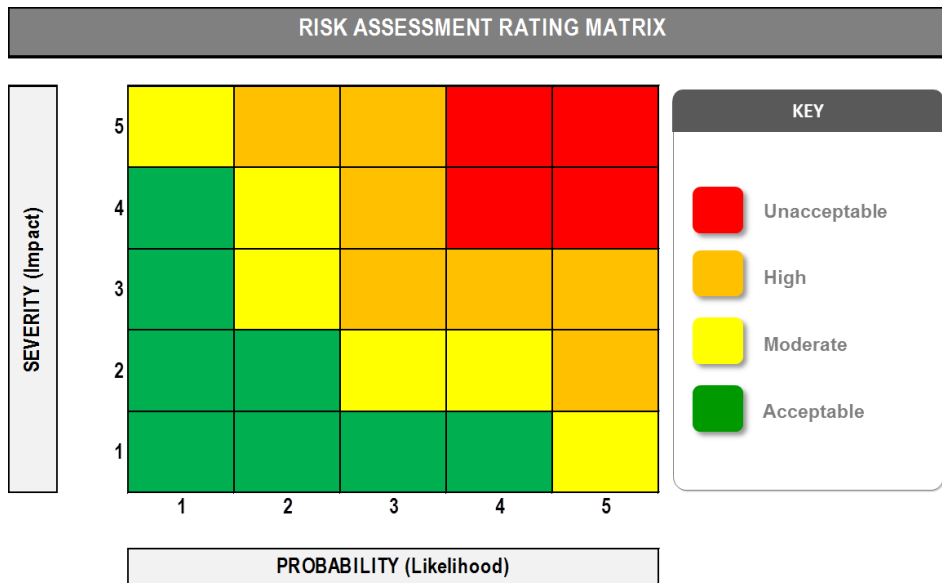
## RISK ASSESSMENT SCORING MATRIX:

Severity	Definition	Rating
Very High	Causing multiple deaths and widespread destruction e.g. fire/ building collapse.	5
High	Causing death, serious injury or permanent disability to an individual.	4
Moderate	Temporary disability causing injury or disease capable of <u>keeping an individual off work for three days or more</u> and reportable under RIDDOR.	3
Slight	Minor injury, which would allow the individual to continue work after first aid treatment on site or at a local surgery. The duration of the stoppage or treatment is such that the normal flow of work is not seriously interrupted.	2
Nil	Very minor injury, bruise, graze, no risk of disease.	1

Likelihood	Definition	Rating
Inevitable	If the work continues as it is, there is almost 100% certainty that an accident will happen, for example: <ul style="list-style-type: none"> <li>▪ A broken stair or broken rung on a ladder</li> <li>▪ Bare, exposed electrical conductors</li> <li>▪ Unstable stacks of heavy boxes</li> </ul>	5
Highly Likely	Will happen more often than not. Additional factors could precipitate an incident but it is still likely to happen without this additional factor.	4
Possible	The accident may occur if additional factors precipitate it, but it is unlikely to happen without them.	3
Unlikely	This incident or illness might occur but the probability is low and the risk minimal.	2
Remote possibility	There is really no risk present. Only under freak conditions could there be any possibility of an accident or illness. All reasonable precautions have been taken - This should be the normal state of the workplace.	1

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All ERP UK risk assessments are scored using the following scoring mechanism:



This Risk Assessment has been given a Risk Score of **9 (MODERATE)**.

Description	RISK SCORE
Injuries due to lifting box incorrectly	MODERATE (9)
Minor/severe cuts from damaged batteries	ACCEPTABLE (6)
Minor/severe burns hazardous materials leakage	ACCEPTABLE (5)
Potential fire due to storing batteries incorrectly / incorrect types	ACCEPTABLE (5)
Injuries due to assembling the box incorrectly	ACCEPTABLE (4)
Storing box in an inappropriate location to prevent damage to the box	ACCEPTABLE (2)
Injuries due to storing batteries incorrectly (Without liner)	ACCEPTABLE (4)
Injuries due to storing batteries incorrectly (Into plastic liner)	ACCEPTABLE (1)
Storing box in an inappropriate location to prevent blockages / ventilation	ACCEPTABLE (1)

Hazard Description	Risk	Likelihood	Severity	Risk Factor	Control Measures identified.
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Manual Handling – lifting the box either up or down from the storage position	Strain / injury from careless handling of load	3	3	9	Manual Handling training for all end users who will be required to lift or move these boxes
Batteries falling out from the bottom of the box as it is lifted due to incorrect/poor assembly	Strain / injury from dropping of load. Batteries falling onto feet. Loose batteries on the floor could lead to potential slips and trips	2	2	4	End users to check that the boxes have been assembled correctly. Training for all end users
Base of box collapsing due to becoming wet from external fluid	Strain / injury from dropping of load. Batteries falling onto feet.	1	2	2	Information provided to ensure box is situated in a dry, convenient and accessible location  Boxes are also provided with liner bags to place inside the box to contain the batteries, therefore the box will remain dry
<b>Hazard Description</b>	<b>Risk</b>	<b>Likelihood</b>	<b>Severity</b>	<b>Risk Factor</b>	<b>Control Measures identified.</b>

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<p>The mixing of a full range of batteries including lithium has the potential for fire</p>	<p>Batteries could come into contact and potentially spark and start a fire.</p>	<p><b>1</b></p>	<p><b>5</b></p>	<p><b>5</b></p>	<p>Boxes to have a delivery slot that will only accept small domestic type batteries</p> <p>Signage is very explicit as to what type of battery can be placed into the box. Signage includes what type of batteries can be recycled, information clearly detailed on the box to ensure batteries are fully discharged (Where possible) and to keep the box in a convenient and accessible location. For larger batteries or those with exposed wires, recommend terminals are taped up.</p>
<p>Storage of batteries in the box (Without liner)</p>	<p>Weight of batteries could be too much for the box itself and collapse. Loose batteries on the floor could lead to potential slips and trips. Any leakage from batteries could result in minor burns when moving box</p>	<p><b>1</b></p>	<p><b>4</b></p>	<p><b>4</b></p>	<p>Boxes are provided with liner bags to place inside the box to contain the batteries. Information clearly detailed on the box to ensure batteries are fully discharged (where possible)</p>
<p>Storage of batteries in the plastic liners</p>	<p>Liners split and contents fall onto feet. Loose batteries on the floor could lead to potential slips and trips</p>	<p><b>1</b></p>	<p><b>1</b></p>	<p><b>1</b></p>	<p>Liners are designed to hold and contain large quantities of batteries</p>

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Hazard Description	Risk	Likelihood	Severity	Risk Factor	Control Measures identified.
Storage of the box itself (ventilation/proximity to fire sensors and extinguishers)	Blockages to fire exits and extinguishers could cause panic and slips and trips in the case of a fire.	1	2	2	Information provided to ensure box is situated in a dry, convenient and accessible location, and not blocking exits, fire sensors or extinguishers
Hazardous material spillage from leaking battery units.	Minor/severe burns from chemical spillage	1	5	5	Wear protective gloves when handling waste batteries. Ensure batteries are placed in the liner to contain any leakage
Sharp parts on batteries caused by damage	Cuts from damaged batteries	3	2	6	Wear protective gloves when handling waste batteries

## Recommendations:

- ↑ Inform all personnel of the findings of the Risk Assessment
- ↑ Consider manual handling training for all those involved with
- ↑ Consider basic training for all those involved as to the requirements of the battery box (Assembly, storage location, battery types, etc)

