

## Safe Work Instruction - Recycling of Lead Acid Batteries

**DO NOT complete this task unless you have been inducted in the safe operation by an Authorised Experienced Person**

This SWI may not cover all possible hazards and risks and should be referred to as a control measure in the risk assessment process.  
Additional training may be required for high risk tasks. Site and task may change required PPE.

### PERSONAL PROTECTIVE EQUIPMENT



Eye protection must be worn



Hand protection must be worn  
(acid resistant PVC gloves)



Long sleeve shirt and long  
sleeve trousers must be  
worn



Foot protection must be worn



Contact lens wearers must  
wear face shield or goggles



Respiratory protection must  
be worn (when required)

### POTENTIAL HAZARDS AND RISKS

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| <p><b>i Health Hazard</b><br/>Severe skin burn<br/>Serious eye damage from acid leak, spray or splash<br/>Toxic if inhaled and may cause respiratory irritation</p> | <p><b>i Manual Task Injury</b><br/>Manual task injury from incorrect manual handling techniques</p> |
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### HANDLING AND STORAGE

- ✓ Ensure to store in a cool, dry, well-ventilated area
- ✓ Ensure to always use correct manual handling techniques if required to move or relocate batteries.
- ✓ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may occur
- ✓ Avoid contact with incompatible materials.
- ✓ Avoid mechanical and thermal shock and friction
- ✓ Avoid smoking, naked flames, heat or ignition sources.
- ✓ If the battery case is broken, avoid contact with internal components, use of an overpack should be implemented to contain leakage.
- ✓ Avoid physical damage to containers.
- ✓ Avoid contact with moisture
- ✓ Remove all battery cables or connections
- ✓ Ensure to store batteries in a vertical position to prevent leakage of battery fluid
- ✓ Slip sheets must be used between the layers to minimise the potential for short circuit and post penetration (heavy duty cardboard is preferable)
- ✓ Ensure to have an eye wash station in the designated storage area.
- ✓ Ensure to have correct PPE (face shield, apron, acid resistant gloves) for use in designated storage area
- ✓ Refer to packaging standard for used lead acid batteries (ULAB)

### ACCIDENTAL RELEASE MEASURES

- ✓ Check regularly for spills and leaks
- ✓ Clean up spills immediately
- ✓ Avoid breathing vapours and contact with skin and eyes
- ✓ With a clean shovel, transfer spilled material into clean-labelled bags for disposal

- ✓ Wash area down with excess water
- ✓ Prevent by any safe means available, spillage from entering drains or water course
- ✓ Implement the Pollution Incident Notification Procedure
- ✓ Isolate area, prevent all access, and move personnel upwind

### ENDING OPERATIONS

- ✓ Always wash hands with soap and water after handling
- ✓ Ensure to only have one layer of batteries per pallet with a slip sheet (cardboard) on top of batteries.
- ✓ Ensure to use clear plastic stretch wrap when packaging to prevent inadvertent movement (black plastic wrap is not acceptable)
- ✓ Ensure pallet is approved spill control, in good condition and placed on appropriate device
- ✓ All pallets or bulk containers must be labelled with a "Class 8 Corrosive" sticker to comply with Dangerous Goods Regulations. The sticker must have minimum size of 100 x 100
- ✓ Refer to packaging standard for used lead acid batteries (ULAB)

### FIRST AID PROCEDURES

**Eye Contact – if this product comes in contact with eyes.**

- ✓ Immediately hold eye lids apart and flush the eye continuously with running water
- ✓ 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
- ✓ Continue flushing until advised to stop by the Poisons Information Centre or a doctor
- ✓ Transport to hospital or doctor without delay

- ✓ Removal of contact lenses after an eye injury should be undertaken by a skilled professional

**Skin Contact – if skin contact occurs**

- ✓ Immediately flush body and clothes with large amounts of water
- ✓ Quickly remove all contaminated clothing, including footwear
- ✓ Wash skin and hair with running water. Continue flushing with water until advised to stop by poisons information centre

**Inhalation – if fumes or combustion products are inhaled**

- ✓ Lay patient down. Keep warm and rested
- ✓ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initialising first aid procedure
- ✓ Apply artificial respiration if not breathing, preferably with a demand valve respirator, bag-valve mask device or pocket mask as trained. Perform CPR if necessary
- ✓ Transport to hospital or doctor without delay

**Ingestion – for advice, contact a Poisons Information Centre or a doctor at once**

- ✓ Urgent hospital treatment is likely to be needed
- ✓ If vomiting occurs, lean patient forward or place on left side (head down position if possible) to maintain open airway and prevent aspiration
- ✓ Observe the patient carefully
- ✓ Never give liquid to a person showing signs of being sleepy or with reduced awareness i.e. becoming unconscious
- ✓ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink

**DO NOT**

- ✗ Do not eat, drink or smoke whilst handling batteries
- ✗ Do not allow water to enter containers of acid as a violent reaction may occur
- ✗ Do not drop batteries, put batteries carefully down on a bunded pallet
- ✗ Do not induce vomiting if battery acid is swallowed.
- ✗ Do not smoke whilst carrying out this task

\*Plant in this SWI refers to any machinery, equipment, appliance, container, implement and tool.