

Guidance in Packaging Scrap Batteries for Shipment to a Lead Smelter

When packaging and shipping scrap batteries to a lead smelter for reclamation, there are two fundamental concepts to always remember: batteries represent both an electrical and a chemical hazard and protection must be provided from both hazards during transportation. It is imperative that batteries are loaded so that no leakage, spillage or short-circuiting occurs during loading or transportation.

The batteries must be stable.

- The battery must be in an upright position and securely banded or shrink wrapped to a skid or pallet. The height must not exceed 1½ times the width of the pallet.
- Each pallet of batteries must be snug to another pallet with no voids. To eliminate possible voids, fill in with empty pallets, bracing, etc. to prevent slipping or sliding.
- Ensure that the scrap batteries and all other cargo are strapped and secured to prevent movement and potential damage during transit.

Batteries must be protected from short-circuiting.

- The terminals must be isolated and connecting straps must be severed or removed prior to shipment.
- If a metal band is used to secure the battery, the metal band must not touch the terminals. If the metal band is near the terminals, place an insulator material such as cardboard, plastic or wood between the terminal and the metal band.
- Double-tiered stacking is not recommended. Battery terminals must not be relied upon to support any weight. Do not stack any cargo directly on top of the terminals. If cargo is loaded on top of batteries, ensure that the cargo is supported by the battery and not by the terminals.

The shipment must be protected from leaking corrosive battery electrolyte.

- Cracked, broken or leaking batteries (including batteries without caps) must not be shipped as is.
- Leaking or broken batteries must be drained so there is no risk of electrolyte leaking during transit. The electrolyte must be placed inside a non-leaking, capped battery cell or plastic carboy for shipment to the lead smelter. The broken battery must be placed inside a heavy mil plastic bag and a plastic container such as a drum or gaylord box.
- Flooded cells that are non-leaking and in good condition do not need to be drained.

Shipping Papers

Use a C & D Straight Bill of Lading with your 24-hour emergency response phone number. C&D's 24-hour emergency phone number (for transportation of C & D products only) is ChemTel at (800) 255-3924.