

Handling Lithium-Ion Batteries and Behavior in Case of Fire

Lithium-ion batteries are widely used in many electronic devices, from smartphones and laptops to electric cars. While they are efficient and powerful, they also pose risks, especially in cases of overcharging, damage, or improper handling. This fact sheet is designed to help you handle lithium-ion batteries safely and respond appropriately in the event of a fire. A lithium-ion battery is marked accordingly, usually with the abbreviation "Li" or "Li-ion".

Handling Lithium-Ion Batteries:

- 1. Avoid Overcharging:**
Only charge lithium-ion batteries with the designated charger and remove them from the charger once fully charged. Overcharging can lead to overheating and damage to the battery.
- 2. Avoid Deep Discharge:**
Do not fully discharge lithium-ion batteries; instead, recharge them in a timely manner to avoid deep discharge, which can cause permanent damage to the battery.
- 3. Avoid Extreme Temperatures:**
Store lithium-ion batteries at room temperature and avoid both extreme heat and extreme cold. High temperatures can shorten the battery's lifespan, while extreme cold can temporarily affect performance.
- 4. Avoid Physical Damage:**
Protect lithium-ion batteries from impacts, drops, and other physical damage that could cause leaks or short circuits.
- 5. Use Compatible Devices and Accessories Only:**
Use chargers, cables, and accessories that are suitable for the specific battery and device to avoid damage.

Behavior in Case of Fire:

- 1. Turn Off the Device:**
If you notice overheating or smoke, immediately turn off the device and remove the battery if possible.
- 2. Remove Flammable Materials:**
Remove flammable materials that may be near the burning battery to safety.
- 3. Use a Fire Extinguisher (if available):**
Use an ABC powder fire extinguisher to extinguish the fire if you have one available and know how to operate it safely. Keep the fire extinguisher secure and use it according to instructions.
- 4. Alert Others:**
Immediately inform others nearby about the fire so they can evacuate to safety.
- 5. Call the Fire Department:**
Immediately call the fire department if the fire becomes uncontrollable or spreads. Provide them with accurate information about the location and nature of the fire.
- 6. Keep Distance:**
Maintain a safe distance from the burning battery to protect yourself from possible explosions or toxic fumes.

7. Wait for Professional Help:

Safely leave the area of the fire and wait for the fire department to arrive. Do not leave unattended fires behind.

Safe handling of lithium-ion batteries requires vigilance and knowledge of potential risks. By following the guidelines above and responding appropriately in case of fire, you can minimize the risk of accidents and ensure your safety as well as the safety of others.