

Lipo Battery and Fire Prevention

Lipo batteries are known to be prone to fire and explosion when they are overcharged, punctured or exposed to high temperature.

The temperature of a lipo battery fire can reach a temperature of a 1000 degrees(1832 F).

The heat generated from a battery fire can cause nearby objects to catch fire and also to emit toxic fumes.

Putting out the fire

- Use a Class D fire extinguisher specifically designed for lithium metal fires.
- Never use water or a regular fire extinguisher. Water can react with the lithium metal and intensify the fire.
- If a fire extinguisher is unavailable, smother the fire with sand or lithium fire blankets.
- 1. Move to Safety:
 - Immediately remove yourself and others from the area.
 - If possible, move the burning battery to an open, well-ventilated area away from flammable materials.
 - Do not move the battery if it is leaking or poses a risk of causing further damage.
- 2. Extinguish the Fire:
 - Use a Class D fire extinguisher specifically designed for lithium metal fires.
 - Never use water or a regular fire extinguisher. Water can react with the lithium metal and intensify the fire.
 - If a fire extinguisher is unavailable, smother the fire with sand or lithium fire blankets.
- 3. Cool the Battery:
 - Once the fire is extinguished, continue to cool the battery with water or a fireproof blanket.
 - Lithium batteries can reignite even after the initial fire is extinguished.
 - Continue cooling the battery for at least 15 minutes to prevent reignition.
- 4. Dispose of the Battery Properly:
 - Once the battery is cool, place it in a metal container filled with sand or another non-flammable material.
 - Do not dispose of the battery in regular trash or recycling bins.
 - Take the battery to a hazardous waste disposal center for proper disposal.

Additional Safety Tips:

Always charge and store lipo batteries in a safe location away from flammable materials.

Never leave a charging lipo battery unattended.

Do not damage or puncture the batteries. If you notice any swelling, bulging, or discoloration of a lipo battery, discontinue use and dispose of it properly.

Discharging the battery

While soaking a lipo battery in salt water will eventually discharge the battery, it is not recommended. Disposing of the salt water containing discharged lithium is an environmental hazard. The lithium can leach into the soil and water, contaminating the environment and harming wildlife.

Soaking the battery in salt water can increase the risk of fire or explosion due to the possibility of short circuits and chemical reactions.

Using a lipo charger designed to discharge the battery is the most efficient and best way.

Discharging the battery using a light bulb will take longer and the possibility of over-discharging is possible. Which could result in a fire hazard.

A severely over-discharged LiPo battery is at a higher risk of catching fire, especially if it is damaged or punctured.

Explosion: In rare cases, a severely over-discharged LiPo battery can explode if it is subjected to a physical shock or high temperature.