



LiPo battery self-combusting 05 February 2019

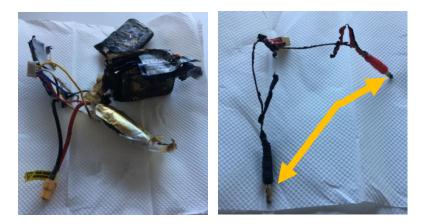
REFERENCE: WHS Act 2012 (SA) Sections 19 & 21 CSH&WSA Procedure No. 14-Hazard Management

OBJECTIVE:

To raise awareness of Lithium Polymer (LiPo) batteries self-combusting when not stored correctly. (*NB this does not apply to NiCd and NiMH batteries*)

BACKGROUND:

Recently a LiPo battery was left on a shelf with a charging connector attached. The red and black (positive and negative shown by yellow arrows on diagram below) were touching, 'shorting' the battery. The battery self-combusted.



When connecting a device ensure the polarity is around the correct way (i.e. Positive/Red/+ connects to Positive/Red/+ and Negative/Black/- connects to Negative/Black/-)

PREVENTATIVE ACTIONS:

How to store LiPo batteries

- Never store loose batteries together. The batteries' terminals may contact one another, causing a short circuit.
- Never store batteries in extreme temperatures or direct sunlight. The battery should be stored within -10°C~45°C range environmental condition.
- Always disconnect batteries when not in use and store batteries in a non-conductive and fireproof container (e.g. LiPo bag).
- Never alter, puncture or impact Batteries or related components.

Remove any extension connectors (example below) prior to storing or charging your LiPo battery



Always use a fire proof LiPo safety bag (e.g. picture below), or other fire proof container when you are charging, discharging, or storing your LiPo batteries. While LiPo fires are rare, they can happen incredibly quickly and can do a lot of damage. All it takes is an internal short circuit to set the battery off. There is no way to predict when it will happen. It does tend to happen more often when batteries are fully charged, being overcharged, or while being discharged, but it can happen to any LiPo at any time.

Never fill the container to capacity with your batteries, always follow manufacturer recommendations on LiPo bags for how many mAh's it can safely contain.

Further information on safe use of LiPo batteries can be found in our June 2018 Safety Bulletin

http://www.cshwsa.org.au/download/2968/



FOR ENQUIRIES OR FURTHER INFORMATION PLEASE CONTACT YOUR WHS CONSULTANT