



FIRE SAFETY WARNING

LITHIUM POLYMER (LIPO) BATTERIES

DATE: March 12, 2012

INFORMATION BULLETIN: H-12-001

APPROVED BY: W T Schellhous

In the recent months there have been several fires caused by Lithium Polymer (LiPo) Batteries. These batteries are commonly used in radio-controlled airplanes and cars by hobbyists. Lithium polymer batteries have a very high energy storage capacity and pose a significant fire hazard while being charged. Unlike other batteries, lithium polymer batteries are chemically volatile and must be charged and handled carefully. When lithium is exposed to oxygen in the air it will ignite and burn explosively. The batteries do not need any other fuel source to start a fire leading to loss of life and/or significant property damage within a structure.

Insurance company investigators have noted an increase in fires resulting from the improper use and handling of lithium polymer batteries. Specific warnings have been issued by manufacturers and it is extremely important that users follow the manufacturer's guidelines.

The following safety practices are recommended:

1. Always store the batteries in a non-combustible container.
2. Never leave the charging process unattended overnight.
3. Use specifically designed chargers for lithium batteries that do not have selectable settings.
4. After a crash of your radio controlled vehicle, let the battery stand in a safe place for 30 minutes.
5. Do not charge physically damaged batteries.
6. If batteries show any sign of swelling, stop charging immediately and remove them to a safe location outdoors, as they could erupt into flames.
7. Do not modify or alter battery packs.
8. Do not put the loose cells in a pocket, bag, drawer, or on metal surfaces where they could short-circuit against other items, or where the battery tabs could be pressed against each other.
9. Do not leave batteries where temperatures may exceed 140 degrees Fahrenheit (60 degrees Celcius).

For additional information visit: www.fire.org.nz/warnings