

## Battery Safety, Storage & Handling.

If any aspect of this delivery or its contents aren't as you expected please **call us immediately 01460 54800**

If you feel we can improve our service in any way you can let us know via our website **[creasefield.co.uk/feedback](https://creasefield.co.uk/feedback)**

Batteries supplied by Creasefield are power sources with high energy content. They are designed to represent the highest possible degree of safety and performance.

The following Handling and Safety guidelines should be followed.

**Please observe any warning notices given with each battery delivery.**

The information contained above is not exhaustive. For further information please visit [www.creasefield.co.uk](http://www.creasefield.co.uk)

## Operation – Design & Fitness for Purpose

Refer to Product Datasheets or respective Technical Notice for information.

Customers should determine fitness for purpose using suitable methods.

For all other Project specific detail please refer to our Design File.

Only use rechargeable Lithium Batteries with an appropriate Safety Unit.

Do not modify any battery pack supplied with a safety unit. Do not remove or modify any safety components contained within any battery pack.

## Charging

Do not use charge currents, charge voltages or termination methods other than those defined in our design approval process and on manufacturers datasheets.

## Discharging

Do not use discharge currents or minimum voltage levels other than those agreed during our design approval process and on manufacturers datasheets.

Always observe acceptable storage and operation conditions as detailed on cell manufacturers datasheets and our design documentation.

## Chemistry Types

### NON Rechargeable (Primary) cells

⚠ Do Not Charge Primary Cells.

Lithium Thionyl Chloride, Lithium Manganese Dioxide, Lithium Iron Disulfide, HLC, TLM, Alkaline

### Rechargeable (Secondary) cells

⚠ Only use approved charging methods.

Lithium Ion, Lithium Ion Polymer, Lithium Iron Phosphate, Lithium Nano Phosphate, Nickel Cadmium, Nickel Metal Hydride, Sealed Lead Acid

## Handling

**Batteries pose a fire, explosion and severe burn hazard.**

⚠ Do not short circuit, disassemble, dispose of in fire, heat, expose to water, puncture or crush. Do not solder directly to the cell or battery and do not connect in reverse polarity. Manufacturers Material Safety Data Sheets are available on request.

## Storage

**Short-term storage of batteries can take place in a dry location with low humidity, no corrosive gases, and at a temperature range of -20°C to +45°C.**

⚠ Storing batteries in a location where humidity is high or where temperatures fall below -20°C or rise above +45°C is not advised.

Because long-term storage can accelerate self-discharge and lead to reduced performance, locations where the temperature ranges between +10°C and +30°C are preferred for long-term storage. When charging for the first time after long-term storage, deactivation of reactants may lead to increased battery voltage and decreased battery capacity. You can restore batteries to original performance by repeating several cycles of charging and discharging. When storing batteries for more than 1 year, charge at least once a year to prevent leakage and deterioration in performance due to self-discharging. Batteries stored whilst connected to equipment and batteries containing sophisticated battery management electronics may need to be monitored and charged several times a year to avoid technical and performance difficulties.

Poor storage conditions and lack of stock management will result in irrecoverable performance loss and will invalidate warranty. Please advise us of your storage plans to ensure a suitable strategy can be devised.

## Disposal

Storage and transport of batteries for disposal (or recycling) requires protection from short circuit. The disposal of cells and batteries is subject to country and region specific laws and regulations.

## Fire

Please refer to specific MSDS for fire-fighting information.