



Handling Precaution & Prohibitions of Rechargeable Cells & Batteries:
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1) General:

- 1.1) Inaccurate handling of rechargeable battery may cause leakage, heat, smoke or fire.
This could cause deterioration of performance or failure. Please be sure to follow instructions carefully.
- 1.2) If at any time you witness a battery starting to balloon, swell up, smoke or hot, discontinue charging process immediately, disconnect the battery and observe it in a safe place for approximately 15 minutes.
- 1.3) Before installing/ removing the battery, be sure to read user's manual of the application.
- 1.4) Don't leave, charge or use the battery in a car or similar place where inside temp. may be over 60 °C.
- 1.5) Don't leave the battery near the fire or a heated source, don't throw the battery into the fire, and don't immerse, throw, wet the battery in water / seawater.
- 1.6) Don't short circuit (+) and (-) terminals with metallic object intentionally.
- 1.7) Don't pierce the battery with a sharp object such as a needle, screw drivers.
- 1.8) Don't heat partial area of the battery with heated objects or solder directly to the battery.
- 1.9) Don't hit with heavy objects such as a hammer and don't throw or drop the battery on hard floor.
- 1.10) Stop using the battery if the battery becomes abnormally hot, discoloration, deformation, or abnormal conditions is detected during use, charge, or storage.
- 1.11) Keep away from fire immediately when leakage or foul odors are detected. If liquid leaks onto your skin or cloths, wash well with fresh water immediately.
- 1.12) If liquid leaking from the battery gets into your eyes, don't rub your eyes and wash them with clean water and go to see a doctor immediately.
- 1.13) If the terminals of the battery become dirty, wipe with a dry cloth before using the battery.
- 1.14) The battery can be used within the following temperature ranges. Don't exceed these ranges.
Charge/Discharge temperature ranges: 0~ 45 °C . Store the battery at temperature below 35 °C .
- 1.15) Discharge current must be controlled by specified value in Cell's spec.
- 1.16) Do not discharge battery to a level below the Cutoff Voltage of the cell under load.
Deep discharge below COV can deteriorate battery performance.
- 1.17) Replace the battery when using time of battery becomes much shorter than usual.
- 1.18) Most of the rechargeable cells/packs: supplied 25-50% charged.

2) Charging:

- 2.1) Use only specific charger only.
- 2.2) Before using charger, be sure to read the user's manual of the charger.
- 2.3) You must check the battery voltage before charging. Do not charge battery with voltage below OCV.
- 2.4) You must select the charge rate current that does not exceed the maximum charge current of the battery.
- 2.5) Use or charge the battery only in the dedicated application.
- 2.6) Charger must stop charging battery by detecting either charging time or current specified in Cell's spec.
- 2.7) Stop charging the battery if charging isn't completed within the specified time.

3) Storage:

- 3.1) The storage area should be clean, cool (below +18°C), dry, ventilated and without dust or corrosive gas atmosphere.
- 3.2) Store battery at temperature between 5 to + 18°C for best results.
- 3.3) Do not expose battery to direct sunlight (heat) for extended periods.
- 3.4) Never store/charge battery inside your car in extreme temp., since extreme temp could ignite fire.
- 3.5) If the battery is needed to be stored for an long period, battery should be removed from the application and stored in a place where humidity and temperature are low.





4) Disposed of properly:

- 4.1) Battery that lose 35% (or user definition) of its capacity should be removed from service and disposed of properly.
- 4.2) Discharge battery to COV, making sure output wires are insulated, and then wrap battery for disposal.
- 4.3) Cover terminals with proper insulating tape before disposal.

5) Transportation:

- 5.1) When transporting or temporarily storing in a vehicle, temp. range should be between -5°C to 50°C.
- 5.2) In the event of a crash due to bad package or other reason, remove the battery for observation and place in a safe open area away from any combustible material for approximately 15 minutes.
- 5.3) Packages that are crushed or punctured, should not be transported. Such packages should be isolated until the shipper has been consulted, provided instructions and arranged to have the product inspected and repacked.
- 5.4) Spilled Product : In the event that damage to packaging results in the release of cells or batteries, the spilled products should be promptly collected and segregated and the shipper should be contacted for instructions.

6) Fire safety:

- 6.1) Only a qualified person may try to fight against flames cause by lithium type batteries.
- 6.2) When the battery creates flames use only masks and protective tools resistant to flames and fire.
- 6.3) When battery creates flames, may also additional elements to ignite such as plastics, metal, etc.
- 6.4) Do not use water or other fluids to fight flames from lithium batteries. A combination of water will cause a chemical reaction to create hydrogen and will lead to an explosion.
- 6.5) Be careful because melted lithium parts may fly as a result of the explosion of the battery.
- 6.6) If the battery catch fire, use only fire extinguisher suitable for lithium (Lith-X Class D or approved for this type of materials according instructions safety expert).
- 6.7) If the flames hit the battery other substances present in the surroundings, made using the appropriate firefighting fire extinguisher to suppress the flames.

7) Warranty Statement:

- 7.1) We warrant this product to be free from defects in materials and workmanship for 3 months from date of purchase from manufacture. Or for period indicated in the company invoices and/or agreements.
- 7.2) During the term of the warranty, should your battery pack, in manufacture's opinion, malfunction, manufacture will, at its option, repair or replace the battery at no charge, provided that this battery pack has not been subjected to misuse, abuse, misapplication, or non-manufacture authorized modifications, alterations and/or repairs.
- 7.3) Manufacture's sole obligation is limited to repair or replacement of this product as provided above. Any use of the battery for a device, which it is not intended, will constitute misuse and is not subject to the warranty. This warranty does not cover damage from everyday wear and tear and/or damage during transportation.
- 7.4) The foregoing constitutes the sole and exclusive warranty of manufacturer & manufacturer disclaims all other warranty expressed, or implied, including any implied warranty of merchantability or fitness for a particular purpose. The foregoing notwithstanding in the event the power product is primarily used for personal or household purpose, expressed and implied warranties for this power product including, but not limited to the warranties of merchant ability and fitness for a particular purpose, are limited in duration to the above 3 months period.
- 7.5) Under no conditions is manufacture liable for any of the following loss or damage to a computer, programs, records, data, revenue, savings, and consequential or incidental damage, even if manufacture is informed of their possibility.
- 7.6) The warranty will not cover any plugs or cables supplied with the battery pack as external accessories.

