

# Important Safety Information

## Charging, Use, and Handling of Small-Sized Lithium-Ion Batteries

The Samsung SDI production process prioritizes product safety and ensures the highest product quality. While cylindrical Lithium-Ion Batteries may appear similar to other types of batteries, the higher energy density in combination with flammable organic electrolyte, rather than traditional aqueous electrolyte, may pose an increased risk of harm if not handled properly as compared to other battery chemistries. Samsung Battery Solutions and Samsung SDI are not liable for death, serious injury, or property damage related to the charging, use, and handling of Lithium-Ion Batteries inconsistent with the safety procedures and practices below.

### Charge:

**1. ALWAYS** refer to your device instruction manual or the charger instruction manual that came with your device for proper charging instructions.

Retain the original product literature that came with your device and its charger for future reference.

**2. ONLY** use the proper charger specifically designed for your Lithium-Ion Batteries or Battery Packs.

A charger that is suitable for a certain type of battery pack could increase the risk of fire when used with another type of battery pack. Safeguards in both Lithium-Ion Battery Packs and Lithium-Ion Battery chargers may prevent short-circuiting, overcharging, and overheating that could result in fire and explosion. Lithium-Ion Batteries must be charged with constant current/constant voltage (CC/CV). The charge current must be lower than the maximum charge current Samsung SDI specified for your battery. The charge voltage must be lower than the maximum charge voltage specified by Samsung SDI for your battery.

**3. Consumers or end-users should only charge Lithium-Ion Battery Packs using dedicated chargers supplied with their device.**

Protection circuitry incorporated in both the Lithium-Ion Battery Packs and their dedicated chargers is essential to prevent short circuits, overcharging, and overheating that can result in battery venting, fire, and explosion.

**4. DO NOT** charge individual, cylindrical Lithium-Ion Batteries if you are a consumer or end-user.

If Lithium-Ion Batteries are charged individually, ALWAYS correctly align the plus (+) and minus (–) terminals. ALWAYS insert batteries into the charger in the proper orientation.

Individual Lithium-Ion Batteries cannot offer the same level of protection as Lithium-Ion Battery Packs.

**5. ALWAYS** monitor Lithium-Ion Batteries and Battery Packs while charging.

Adult supervision required. Proper monitoring may prevent short circuits, overcharging, and overheating that can result in battery venting, fire, and explosion.

**6. CHARGE** indoors at room temperature.

If the temperature is too high or too low, your batteries may be damaged. If the humidity is too high, your batteries may be damaged.

**7. DO NOT** place charger and Lithium-Ion Batteries or Battery Packs under your pillow, on your bed, or on your couch.

**8. DO NOT** leave Lithium-Ion Batteries or Battery Packs on the charger for prolonged periods of time.

DO NOT overcharge Lithium-Ion Batteries. Lithium-Ion Batteries and Battery Packs should not be charged overnight.

Your charger may possibly shut down after a period of time. See your charger manual for additional information.

## **Proper use:**

### **1. INSPECT Lithium-Ion Batteries and Battery Packs before use.**

NEVER use a Lithium-Ion Battery or Battery Pack with visible damage or suspected internal damage. NEVER remove outer plastic cover or use a battery or battery pack with a damaged cover. DO NOT use again and dispose of batteries. See “Proper Disposal” section.

### **2. DO NOT use individual, cylindrical Lithium-Ion Batteries if you are a consumer or end-user.**

ALWAYS confirm that your device has the proper safeguards for individual Lithium-Ion Batteries. If individual Lithium-Ion Batteries are used in a device, ALWAYS properly insert batteries and align the plus (+) and minus (–) terminals correctly.

Devices with two or more batteries may function even if one battery is not properly aligned, but this can result in fire or damage to your device.

Individual Lithium-Ion Batteries cannot offer the same level of protection as Lithium-Ion Battery Packs.

### **3. NEVER remove individual Lithium-Ion Batteries from Battery Packs.**

### **4. ONLY use batteries of the correct type, size, and capacity as specified by your device manufacturer.**

ONLY use battery or battery packs specified for use with your device.

### **5. NEVER attempt to use, modify, or build a device that does not have proper safeguards for Lithium-Ion Batteries.**

These safeguards prevent overheating, fire, and explosion by automatically turning off the power. Samsung SDI is not aware of any e-cigarette, vaporizer, or battery-powered fan on the market that has the proper safeguards to safely use Lithium-Ion Batteries as the power source. Currently, device manufacturers are not required to include necessary safeguards to prevent over-current, overcharge, or low-voltage protection.

To ask if a Samsung SDI Lithium-Ion Battery may be used in a particular product, please submit your question using our website: <http://www.samsungsdi.com/cs-center-inquiry.html>

### **6. ALWAYS properly charge Lithium-Ion Batteries and Battery Packs.**

See “Proper Charging” section.

### **7. ALWAYS replace all used Lithium-Ion Batteries at the same time.**

A combination of old and new batteries may result in fire or explosion.

### **8. DO NOT dismantle, open or shred Lithium-Ion Batteries.**

### **9. ALWAYS use Lithium-Ion Batteries that are of the same size, type, capacity, and manufacturer.**

NEVER use or combine batteries of different types, sizes, or from different manufacturers. Mixing different types (e.g. alkaline, nickel-metal hydride, nickel-cadmium, etc.), sizes, or capacities may result in fire or explosion.

### **10. REPLACE Lithium-Ion Batteries when the time between charges decreases significantly.**

NEVER use or charge Lithium-Ion Batteries or Battery Packs if the voltage is less than 2.5 V/cell. When the time between charges significantly decreases, check the voltage of the Lithium-Ion Batteries or Battery Packs before charging.

**Handling:**

1. **FIRST AID** – If battery fluid gets on your skin or in your eyes, wash immediately with water and seek medical attention.

Battery fluid may cause irritation or burns.

2. **ONLY** use Lithium-Ion Battery Packs if you are a consumer or end-user.

Battery packs should have safeguards to prevent thermal runaway.

3. **DO NOT** handle individual, cylindrical Lithium-Ion Batteries if you are a consumer or end-user.

Individual Lithium-Ion Batteries cannot offer the same level of protection as Lithium-Ion Battery Packs.

4. **NEVER** short circuit Lithium-Ion Batteries, Battery Packs or battery holders.

Forcing Lithium-Ion Batteries to discharge may result in leaks, fire or explosion.

5. If dirty, **WIPE** terminals with a dry cloth before use.

6. For air travel, leave battery packs installed.

Removing battery packs from devices does not enhance safety.

Pack spare batteries in carry-on baggage. Flight crew members may be able to better monitor conditions in the passenger compartment to prevent an incident, and, if an incident does occur, may be able to access fire extinguishers quickly.

**Storage:**

1. **DO NOT** remove individual Lithium-Ion Batteries or Battery Packs from the original packaging until required for use.

2. If possible, **ALWAYS** remove Lithium-Ion Batteries or Battery Pack if the device will not be used for several months.

Batteries may leak if left in the device for extended periods of time.

After extended periods of storage, always check the voltage of the batteries or battery pack prior to charging. **NEVER** use or charge batteries or battery packs if the voltage is less than 2.5 V/cell.

**Disposal:**

1. **ALWAYS** dispose of batteries according to local, state or federal laws. **DO NOT** put Lithium-Ion Batteries in the trash.

Consult your local waste authority for information about recycling or disposal options. You may be able to bring Lithium-Ion Batteries and Battery Packs to local stores for proper disposal.

2. **ALWAYS** cover terminals with tape to prevent inadvertent contact with other batteries or metal objects.

3. **DO NOT** mix alkaline or other types of batteries with your used Lithium-Ion Batteries.

4. **DO NOT** place used batteries in piles, drawers, bags, boxes or other containers together.

Used batteries may still have a partial charge. If the partially charged batteries come in contact with other batteries or metal objects, the remaining stored energy could discharge and cause a fire or explosion.

5. **NEVER** dispose of batteries in a fire.

Fire may cause the batteries to explode, resulting in a chemical burn and serious injury.

## **E-cigarette and Vapor:**

### **IMPORTANT SAFETY WARNING**

**STOP USING REPLACEABLE AND RECHARGEABLE LITHIUM-ION BATTERY CELLS (HEREINAFTER REFERRED TO AS "RLIBC") MANUFACTURED BY SAMSUNG SDI IN YOUR VAPE OR E-CIGARETTE DEVICE! SAMSUNG SDI'S RLIBC ARE NOT INTENDED FOR ANY USE BY INDIVIDUAL CONSUMERS. SUCH USE CAN RESULT IN FIRE OR EXPLOSION, WHICH CAN CAUSE SERIOUS INJURY OR PROPERTY DAMAGE.**

1. Samsung SDI's RLIBC are not designed or manufactured for use in ANY vape or e-cigarette device.
2. Samsung SDI's RLIBC are designed for use in power tools and other power products such as laptop computers that incorporate a battery management unit that reduces the risk of thermal runaway.
3. Samsung SDI's RLIBC are not designed for and should not be handled by ANY individual consumer. Samsung SDI is not responsible for ANY serious injury, property damage, or loss of life resulting from any use of its RLIBC by individual consumers.
4. Samsung SDI did not authorize ANY third parties, including e-cigarette and vape manufacturers, retailers and distributors to sell or use Samsung SDI's RLIBC for individual consumers as power sources in e-cigarettes or vape devices.
5. Please also refer to statements regarding e-cigarette safety released by the U.S. Fire Administration, the FDA, and the Consumer Technology Association.