**Device Safety Assurance: Non-Ignition VistaZ and VistaZ Link CVZ-0303**

**Declaration**

Based on our comprehensive understanding derived from certifications, historical experience, field trials, and feedback, we affirm that these devices do not pose a risk of ignition

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At CoolR, we prioritize safety and reliability in all our products. This document serves to elucidate and assure that our VistaZ does not act as an ignition source and possesses fireproof characteristics, ensuring a secure operating environment.

# Environment Description

## Material Composition

### Enclosure

1. VistaZ is constructed from ABS, a food-grade and flame-resistant material, ensuring enhanced safety

### PCB (Printed Circuit Board)

1. The PCB features a conformal coating to protect against environmental factors.
2. The circuit includes reverse and short circuit protection mechanisms for added safety.
3. VistaZ does not incorporate any mechanical relays, further enhancing safety.

### Battery

1. The Lithium battery (18650) used in VistaZ has certifications such as MSDS, demonstrating its safety when used as instructed.
2. VistaZ uses a single 18650 battery instead of a pack containing multiple batteries, greatly reducing safety risks associated with multi-cell packs, where one deteriorated cell can cause a chain reaction leading to a sudden discharge of energy. This risk is not applicable to VistaZ due to the single-cell configuration.
3. The device operates at a power consumption/current draw under 4.2V, avoiding sudden power spikes that could cause damage. The trickle charge current is minimal (in microamperes), reducing the risk of battery overheating.
4. The device’s IP67 rating protects it from risks related to battery fracturing or leaking, containing any battery abnormalities within the VistaZ enclosure.

## Potential Ignition Sources

### **Battery:**

1. VistaZ operates using a single-cell battery configuration, minimizing potential risks. Safety protocols, including reverse protection circuits and short circuits, are in place to mitigate hazards in the event of battery damage.

### **External Sources:**

1. VistaZ has passed the IP67 rating, confirming its resilience against external factors that might pose ignition risks.

## Safety Protocols

1. Handle the equipment with care, avoiding dropping, puncturing, or subjecting it to shocks.
2. Maintain a controlled environment, keeping temperatures within the specified range (Operating: -20°C to +50°C, Storage: -20°C to +70°C) for optimal performance.

## Safety Standards and Certifications:

1. VistaZ meets the rigorous standards set by IP67, validating its safety measures against external influences.

## Supporting Evidence:

We have conducted comprehensive tests and obtained certifications. Please find below videos and certifications that further support our claims.

1. No Danger Short circuit test video - <https://coolrgroup-my.sharepoint.com/:v:/p/vasu_jain/EVOdlDO6r4dOt8UFlpPaVzwBSvieoqW5u9PDuzBex1hCxg?e=N5qVzz>
2. MSDS report - <https://coolrgroup-my.sharepoint.com/:b:/p/vasu_jain/EaHzCgU1rJ9Du_DZm1EwDQoBZlPdse0ZxjK5znZGYixH-Q?e=7YoJnO>
3. Battery datasheet - <https://coolrgroup-my.sharepoint.com/:b:/p/vasu_jain/EWKwsu4xGbRKu3t8h1hPNrwB17yva168fPxeO-sh-ewN-A?e=ltFsEP>
4. BIS certification - <https://coolrgroup-my.sharepoint.com/:b:/p/vasu_jain/EYdkCBG4IOVPqPKroZVS79wBbjJw-1g0XAwuzPrhqivtCw?e=HxcDIy>