



FIRE RISK MITIGATION FOR LITHIUM-ION BATTERIES

INSURANCE PERSPECTIVE

BACKGROUND

Lithium-ion battery incidents are increasing and often result in severe financial and environmental damage.



INSURANCE CHALLENGES

- Difficult to extinguish fires
- High loss severity
- Secondary damages from smoke and gases



RISK MITIGATION APPROACH

- Containment instead of traditional suppression
- Controlled fire scenario
- Reduced damage footprint



VERIFIED TEST RESULTS

- No flame spread outside enclosure
- External temperature below 60°C
- Cabinet remains structurally intact



INSURANCE VALUE

- Reduced maximum foreseeable loss
- Improved risk profile
- Potential for premium adjustments

KIWA REFERENCE:



“Fire incidents... caused significant damage — both in terms of economic loss and environmental impact.” (Kiwa Test Report, 2025, p.4)



“They tend to focus primarily on saving lives... property and environmental protection are not prioritized...” (Kiwa Test Report, 2025, p.4)



“No flames or sparks were observed outside the cabinet.” (Kiwa Test Report, 2025, p.16)



“External surface temperatures below 60°C...” (Kiwa Test Report, 2025, p.5)



“The packaging has retained its structural integrity...” (Kiwa Test Report, 2025, p.19)