



EN Fire Risk Mitigation for Lithium-Ion Batteries – Insurance Perspective

SV Minskning av brandrisk för litiumjonbatterier – försäkringsperspektiv

FR Réduction du risque d'incendie des batteries lithium-ion – perspective assurance

DE Reduzierung des Brandrisikos bei Lithium-Ionen-Batterien – Versicherungsperspektive

IT Riduzione del rischio di incendio per batterie agli ioni di litio – prospettiva assicurativa

NL Beperking van brandrisico bij lithium-ionbatterijen – verzekeringsperspectief

ES Mitigación del riesgo de incendio de baterías de iones de litio – perspectiva aseguradora



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)



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MINSKNING AV BRANDRISK FÖR LITIUMJONBATTERIER – FÖRSÄKRINGSPERSPEKTIV

BAKGRUND

Incidenter med litiumjonbatterier ökar och leder ofta till allvarliga ekonomiska skador och miljöskador.



UTMANINGAR FÖR FÖRSÄKRINGSGIVARE

- Bränder som är svåra att släcka
- Hög skadeomfattning
- Sekundära skador från rök och gaser



METOD FÖR RISKREDUCERING

- Inneslutning i stället för traditionell brandsläckning
- Kontrollerat brandförlopp
- Minskad skadeomfattning



VERIFIERADE TESTRESULTAT

- Ingen flamspridning utanför kapslingen
- Utvändig temperatur under 60 °C
- Skåpet behåller sin strukturella integritet



FÖRSÄKRINGSVÄRDE

- Minskad maximal förutsebar skada
- Förbättrad riskprofil
- Möjlighet till premiejusteringar

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RÉDUCTION DU RISQUE D'INCENDIE DES BATTERIES LITHIUM-ION –

PERSPECTIVE ASSURANCE

CONTEXTE

Les incidents impliquant des batteries lithium-ion augmentent et entraînent souvent de graves dommages financiers et environnementaux.



ENJEUX POUR L'ASSURANCE

- Incendies difficiles à éteindre
- Forte gravité des sinistres
- Dommages secondaires dus aux fumées et aux gaz



APPROCHE DE RÉDUCTION DES RISQUES

- Confinement plutôt qu'extinction traditionnelle
- Scénario d'incendie maîtrisé
- Étendue des dommages réduite



RÉSULTATS D'ESSAIS VÉRIFIÉS

- Aucune propagation de flammes hors de l'enceinte
- Température extérieure inférieure à 60 °C
- L'armoire conserve son intégrité structurelle



VALEUR POUR L'ASSURANCE

- Réduction de la perte maximale prévisible
- Profil de risque amélioré
- Possibilité d'ajustement des primes

RÉFÉRENCE KIWA :



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REDUZIERUNG DES BRANDRISIKOS BEI LITHIUM-IONEN-BATTERIEN – VERSICHERUNGSPERSPEKTIVE

HINTERGRUND

Vorfälle mit Lithium-Ionen-Batterien nehmen zu und führen häufig zu erheblichen finanziellen und ökologischen Schäden.



HERAUSFORDERUNGEN FÜR VERSICHERER

- Schwer zu löschende Brände
- Hohe Schadenshöhe
- Folgeschäden durch Rauch und Gase



ANSATZ ZUR RISIKOMINDERUNG

- Eindämmung statt herkömmlicher Brandbekämpfung
- Kontrolliertes Brandszenario
- Reduzierter Schadensumfang



VERIFIZIERTE TESTERGEBNISSE

- Keine Flammenausbreitung außerhalb der Einhausung
- Außentemperatur unter 60 °C
- Schrank bleibt strukturell intakt



VERSICHERUNGSNUTZEN

- Reduzierter maximal vorhersehbarer Schaden
- Verbessertes Risikoprofil
- Potenzial für Prämienanpassungen

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RIDUZIONE DEL RISCHIO DI INCENDIO PER BATTERIE AGLI IONI DI LITIO –

PROSPETTIVA ASSICURATIVA

CONTESTO

Gli incidenti con batterie agli ioni di litio sono in aumento e spesso causano gravi danni economici e ambientali.



SFIDE ASSICURATIVE

- Incendi difficili da estinguere
- Elevata gravità delle perdite
- Danni secondari da fumo e gas



APPROCCIO ALLA MITIGAZIONE DEL RISCHIO

- Contenimento anziché estinzione tradizionale
- Scenario di incendio controllato
- Riduzione dell'area danneggiata



RISULTATI DI PROVA VERIFICATI

- Nessuna propagazione delle fiamme all'esterno dell'involucro
- Temperatura esterna inferiore a 60 °C
- L'armadio mantiene l'integrità strutturale



VALORE ASSICURATIVO

- Riduzione della perdita massima prevedibile
- Profilo di rischio migliorato
- Potenziale adeguamento dei premi

RIFERIMENTO KIWA:



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BEPERKING VAN BRANDRISICO BIJ LITHIUM-IONBATTERIJEN –

VERZEKERINGSPERSPECTIEF

ACHTERGROND

Incidenten met lithium-ionbatterijen nemen toe en leiden vaak tot ernstige financiële en milieuschade.



UITDAGINGEN VOOR VERZEKERAARS

- Moeilijk te blussen branden
- Hoge schade-ernst
- Secundaire schade door rook en gassen



AANPAK VOOR RISICOBEPERKING

- Insluiting in plaats van traditionele blussing
- Beheerst brandscenario
- Beperkte schadeomvang



GEVERIFIEERDE TESTRESULTATEN

- Geen vlamverspreiding buiten de behuizing
- Buitentemperatuur onder 60 °C
- Kast blijft structureel intact



VERZEKERINGSWAARDE

- Lagere maximaal voorzienbare schade
- Verbeterd risicoprofiel
- Mogelijkheid tot premieaanpassingen

KIWA-REFERENTIE:



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MITIGACIÓN DEL RIESGO DE INCENDIO DE BATERÍAS DE IONES DE LITIO –

PERSPECTIVA ASEGURADORA

ANTECEDENTES

Los incidentes con baterías de iones de litio están aumentando y suelen provocar graves daños económicos y medioambientales.



DESAFÍOS PARA LAS ASEGURADORAS

- Incendios difíciles de extinguir
- Alta gravedad de las pérdidas
- Daños secundarios por humo y gases



ENFOQUE DE MITIGACIÓN DEL RIESGO

- Contención en lugar de extinción tradicional
- Escenario de incendio controlado
- Reducción del alcance de los daños



RESULTADOS DE ENSAYO VERIFICADOS

- Sin propagación de llamas fuera del recinto
- Temperatura exterior inferior a 60 °C
- El armario mantiene su integridad estructural



VALOR PARA EL SEGURO

- Reducción de la pérdida máxima previsible
- Mejora del perfil de riesgo
- Posibilidad de ajustes de prima

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