



U.S. Department
of Transportation

**Pipeline and Hazardous
Materials Safety
Administration**

1200 New Jersey Avenue, SE
Washington, DC 20590

May 22, 2026

Rory Pynenburg, PhD
Mobile Power Solutions
9665 SW Allen Blvd
Suite 110
Beaverton, OR 97005

Reference No. 26-0015

Dear Dr. Pynenburg:

This letter is in response to your January 26, 2026 email requesting clarification of the Hazardous Materials Regulations (HMR; 49 CFR Parts 171-180) applicable to testing requirements for lithium-ion cells and batteries, in accordance with Section 38.3 of the United Nations (UN) Manual of Tests and Criteria. Specifically, you request clarification of the UN Manual of Tests and Criteria, Subsection 38.3.4.8, Test T.8: Forced discharge, as it relates to the definition of “disassembly” and “fire” during testing. You describe a scenario in which, during the rest period following T.8 testing, a pouch cell’s envelope burst at a corner, exposing a small, singed protrusion of internal components. You note that no visible flame was observed, and the mesh screen barrier placed 25 cm away was not penetrated. You ask whether this specific result constitutes a test failure.

In accordance with Subsection 38.3.4.8.3, cells meet the T.8 testing requirement if there is no disassembly and no fire during the test and within seven days after the test. Subsection 38.3.2.3 states “disassembly” means a rupture of the cell or battery case where solid components are ejected. However, there is a note to the definition of “disassembly,” which states that during cell or component cell testing, ejection of internal components is acceptable provided the energy of the ejected components does not penetrate a wire mesh screen (annealed aluminum wire with a 0.25 mm diameter and grid density of 6 to 7 wires per cm) placed 25 cm from the cell. Based on your observation that the mesh screen remained intact, and the components were merely exposed or protruding rather than forcefully ejected beyond the screen, it is the opinion of this Office that the event described does not meet the criteria for “disassembly.” In addition, Subsection 38.3.2.3 states “fire” means that flames are emitted from the test cell or battery. You note that no visible flame was observed. While you state the internal material was singed, in the absence of a visible flame, it is the opinion of the Office this does not constitute a “fire” for the purposes of passing or failing the T.8 test.

Based on your description that there was no disassembly (as defined by Subsection 38.3.2.3) and no visible flame, it is the opinion of this Office that the condition of the cell would likely not constitute a failure of the T.8 test.

I hope this information is helpful. Please contact us if we can be of further assistance.

Sincerely,

A handwritten signature in blue ink, reading "Alexander Wolcott". The signature is fluid and cursive, with a long horizontal stroke extending from the end.

Alexander Wolcott
Acting Chief, Regulatory Review and Reinvention Branch
Standards and Rulemaking Division

From: [INFOCNTR \(PHMSA\)](#)
To: [Baker, Yul \(PHMSA\)](#)
Cc: [Hazmat Interps](#)
Subject: FW: Request for interpretation of section 38.3.4.8.
Date: Tuesday, January 27, 2026 2:33:17 PM

Good afternoon,

Please see the following request for a letter of interpretation. Let us know if you need anything else.

Best,

Aminah

From: Rory Pynenburg <RPynenburg@mobilepowersolutions.com>
Sent: Monday, January 26, 2026 6:20 PM
To: INFOCNTR (PHMSA) <INFOCNTR.INFOCNTR@dot.gov>
Cc: Jeremy Le Grand <JGrand@mobilepowersolutions.com>; Spencer Poff <SPoff@mobilepowersolutions.com>; Chuck Weitzel <CWeitzel@mobilepowersolutions.com>
Subject: Request for interpretation of section 38.3.4.8.

You don't often get email from rpynenburg@mobilepowersolutions.com. [Learn why this is important](#)

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Good afternoon,

I'm reaching out to request an interpretation of section 38.3.4.8.

During the rest period following T.8 forced discharge testing a pouch cell had a corner of its envelope burst, exposing a small, singed protrusion of internal components. The burst did not break our mesh screen barrier. We did not witness visible flame during the test, but the exposed internal material is singed. Picture attached for reference.

T.8 requirements: Primary or rechargeable cells meet this requirement if there is no disassembly and no fire during the test and within seven days after the test.

Disassembly means a rupture of the cell or battery case where solid components are

ejected.

Note: During cell or component testing, ejection of internal components is acceptable.

Energy of ejected components shall be limited and can be measured as follows:

-will not penetrate a wire mesh screen (annealed aluminum wire with a diameter of .25mm and grid density of 6 to 7 wires per cm) placed 25 cm away from cell; or

-it can be measured by a method demonstrated to be equivalent to the one described in sub-paragraph (a) above.

Rupture means the mechanical failure of a cell container or battery case induced by an internal or external cause, resulting in exposure or spillage but not ejection of solid materials.

Please advise if this constitutes a failure based on the standard.

Thank you,

Rory Pynenburg

Rory Pynenburg, PhD
CTO

MOBILEPOWER
SOLUTIONS

9665 SW Allen Blvd, Suite 110,

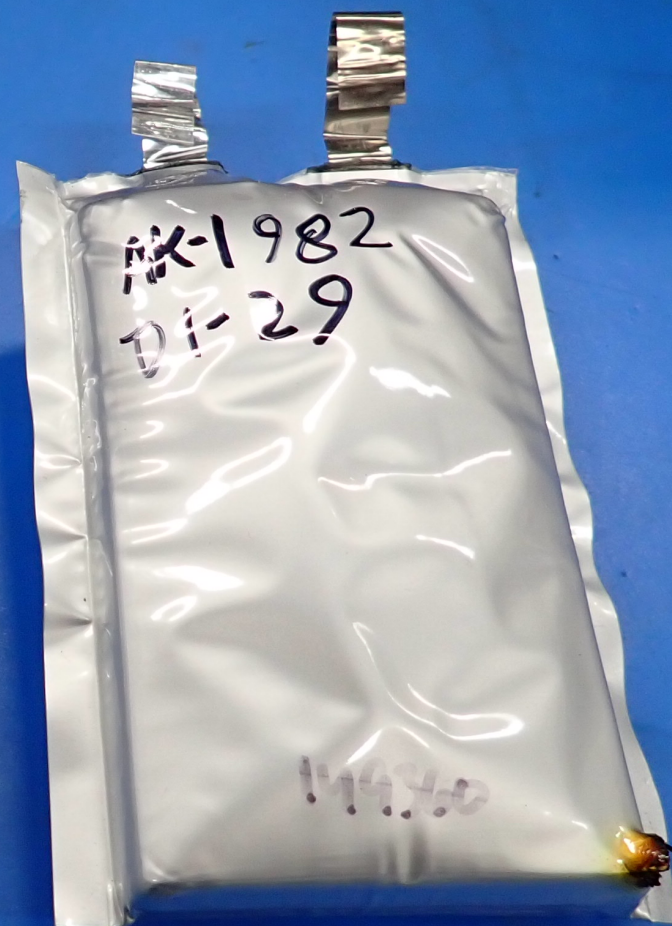
Beaverton, OR 97005

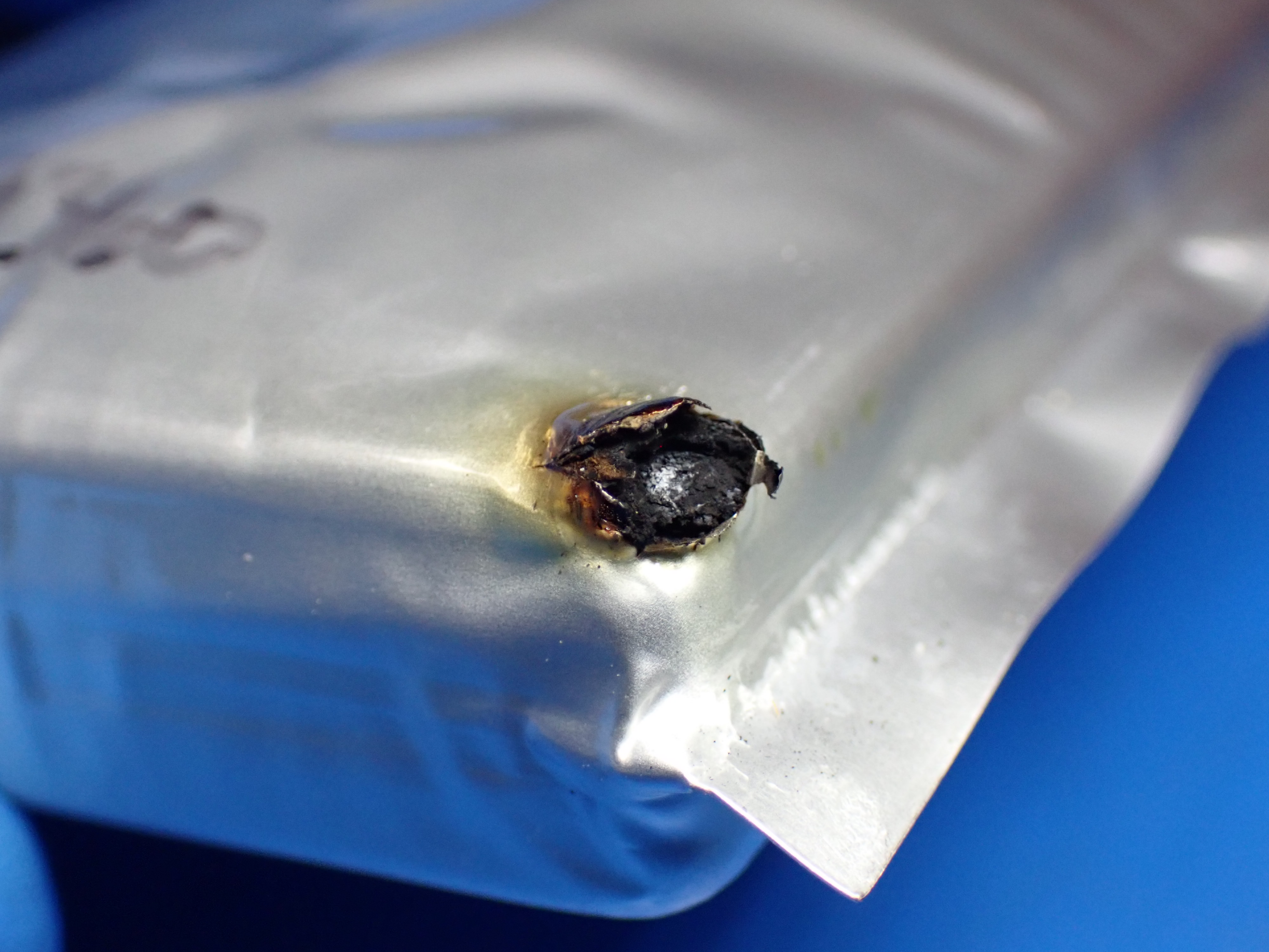
503-645-6789

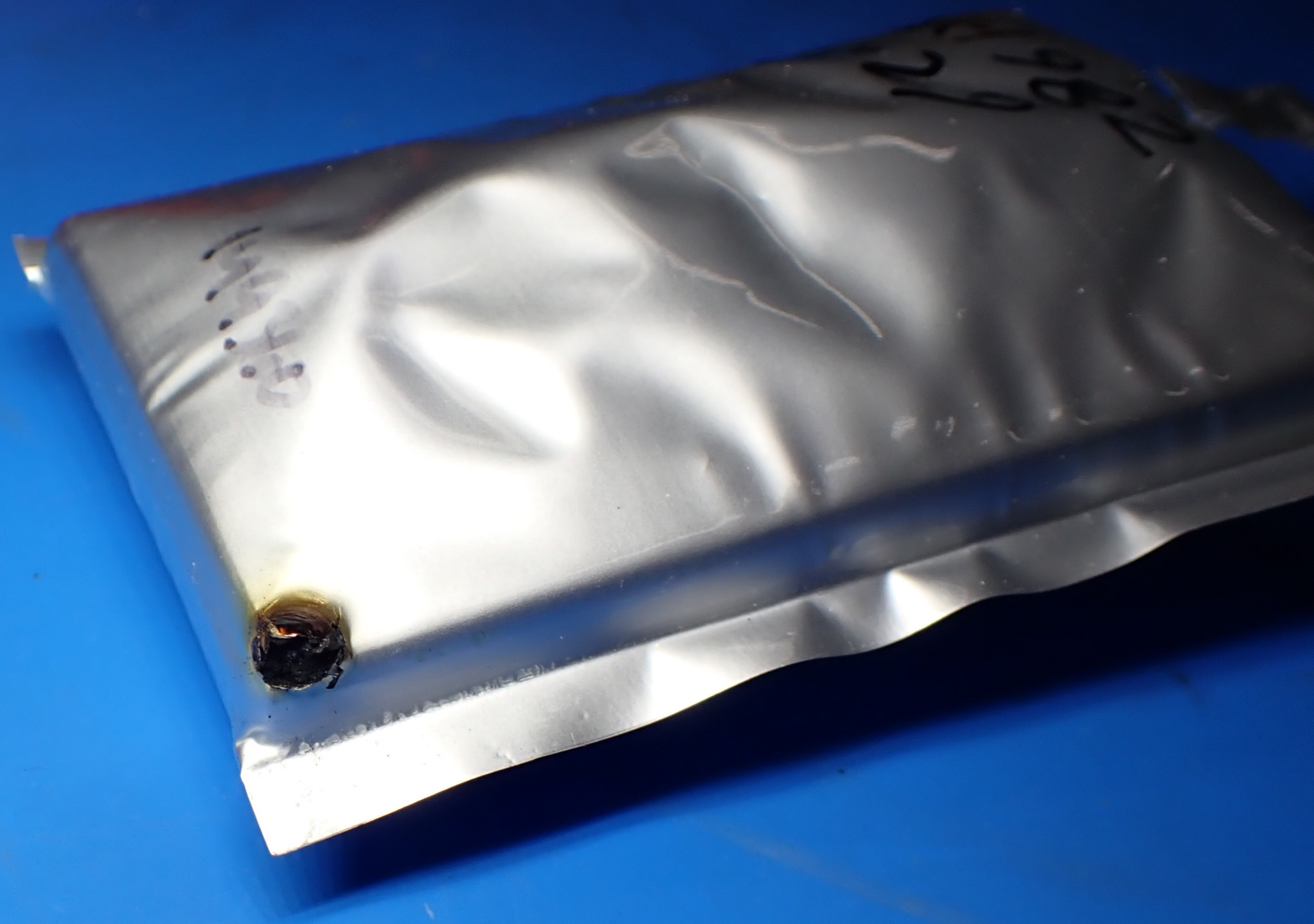
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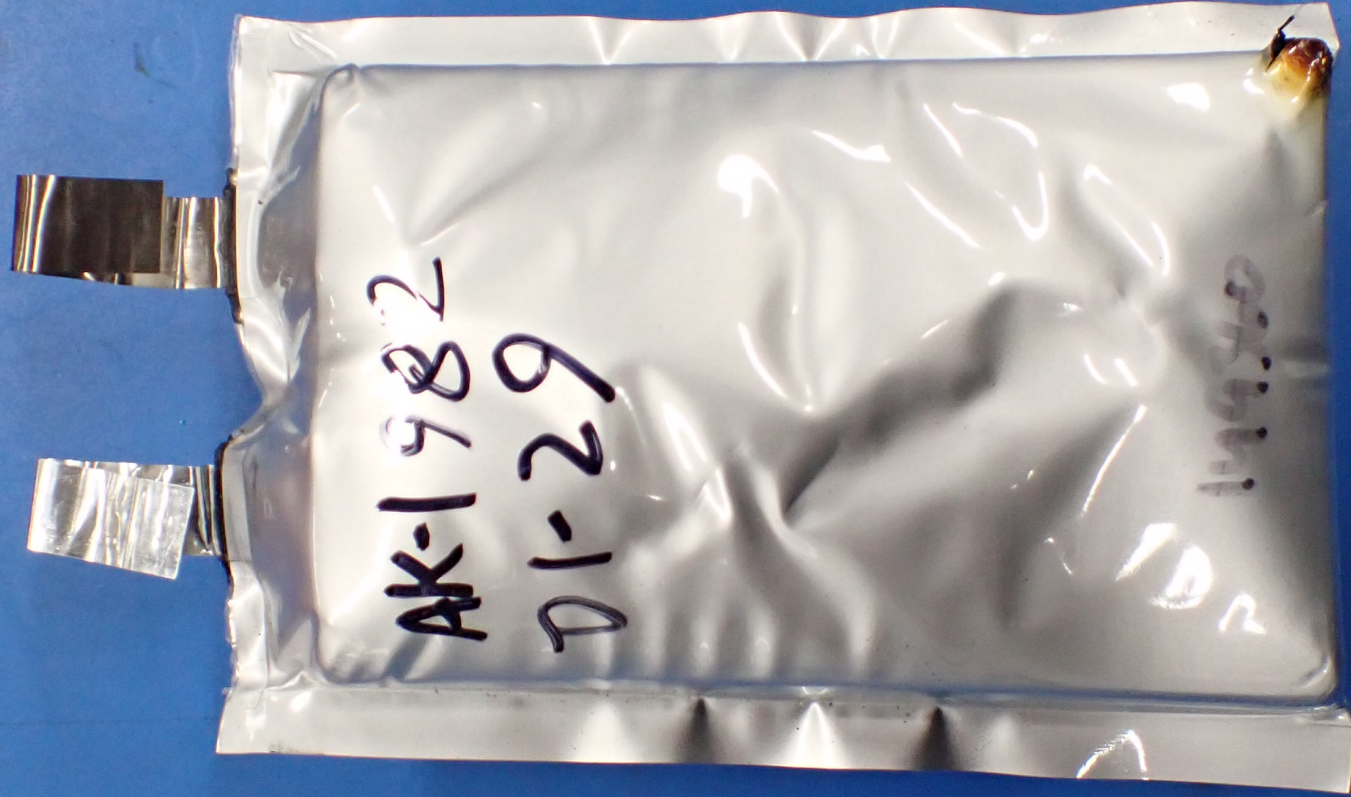
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