

ITEM: Lithium bis(fluorosulfonyl)imide, the product is in the form of a white powder and is used for manufacturing a lithium-ion battery. Its CAS RN is 171611-11-3.

Tariff Classification Suggestion

Phase 1

Top 3 candidate chapters

Chapter Justification

28 By GRI 1, classify by the texts of headings/Notes. Chapter 28 covers single chemically defined compounds (Note 1) and, specifically, headings 28.26–28.42 cover only metal or ammonium salts; lithium salts fall here (Note 5). When not otherwise covered, other salts of inorganic acids are in 28.42 .

29 Chapter 29 is for organic chemicals (Note 1). Inorganic salts of organic compounds are classified with the corresponding organic compound (Note 6 C 1°); if considered an organic sulfonamide/-imide type, headings under 29 (e.g., 29.35 Sulfonamides or 29.29 Other nitrogen-function compounds) could be examined, but this is secondary here .

38 Exclude Chapter 38: it does not cover single chemically defined products presented separately (Note 1 a), except specific cases not applicable here. Such substances are generally classified in Chapters 28 or 29 .

Phase 2

TARIFF CLASSIFICATION RULING

I. Applicable legal framework

- General Rules for the Interpretation of the Harmonized System (GRI):
 - “The titles of Sections, Chapters and Subchapters are provided for ease of reference only; for legal purposes, classification shall be determined according to the terms of the headings and any relative Section or Chapter Notes...” (Rule 1) .
 - “The heading which provides the most specific description shall be preferred to headings providing a more general description...”; “Mixtures, composite

- goods... shall be classified as if they consisted of the material or component which gives them their essential character..." (Rules 3(a) and 3(b)) .
- Rule 6 (applicable to subheadings): "For legal purposes, the classification of goods in the subheadings... shall be determined according to the terms of those subheadings and any related Subheading Notes and, mutatis mutandis, to the above Rules..." .
 - Chapter 28 – Notes:
 - Note 1 (scope of Chapter 28): "Except where the context otherwise requires, the headings of this Chapter apply only to... separate chemically defined compounds, whether or not containing impurities" .
 - Note 5 (salts): "Headings 28.26 to 28.42 include only salts and peroxysalts of metals or of ammonium. Except where the context otherwise requires, double or complex salts are to be classified in heading 28.42." .
 - Relevant headings (Chapter 28 and 29):
 - 28.42: "Other salts of inorganic acids or peroxyacids (including aluminosilicates, whether or not of definite chemical composition), other than azides." .
 - 28.26: "Fluorides; fluorosilicates, fluoroaluminates and other complex fluorine salts." .
 - 28.11: "Other inorganic acids and other inorganic oxygen compounds of non-metals." (covers acids, not their salts) .
 - 28.53: "Phosphides...; other inorganic compounds (including distilled water...)..." ; subheadings 2853.10 (cyanogen chloride) and 2853.90 (other) .
 - Ch. 29 (organic character): "The compounds of headings 29.30 and 29.31 are organic compounds... directly linked to carbon" (illustrative criterion of organic nature; does not apply to inorganic compounds without carbon) .
 - 29.20: "Esters of other inorganic acids of nonmetals (excluding esters of hydrogen halides) and their salts..." (specific regime for esters, not salts per se of non-ester acids) .
 - 29.25: "Carboximide-function compounds... or imine-function compounds" (organic scope) .

II. Legal-technical analysis

- 49 • Product identification: Lithium bis(fluorosulfonyl)imide (LiFSI), white powder, used

50 in manufacturing lithium-ion batteries; CAS RN 171611-11-3 (salt of the inorganic

51 acid bis(fluorosulfonyl)imide).
- 52 • Chapter selection (28 vs 29):

 - 53 – The product is a lithium salt, with no carbon atoms in the anion; it is an

54 inorganic compound of defined chemical constitution presented as such,

55 which falls within Chapter 28 per Note 1 to Chapter 28 .
 - 56 – Chapter 29 governs organic chemicals; its functional notes (e.g., for 29.30

57 and 29.31) presuppose organic compounds with atoms directly bonded to

58 carbon, which is not the case here . Therefore, Chapter 29 is not applicable

59 (GRI 1).
- 60 • Heading determination within Chapter 28:

 - 61 – The product is a metal salt (Li⁺) of an inorganic acid. By Note 5 to Chapter 28,

62 metal salts are classified in headings 28.26 to 28.42; absent a more specific

63 provision, double or complex salts are classified in 28.42 .
 - 64 – Heading 28.42 textually covers “the other salts of inorganic acids or

65 peroxyacids,” which matches a lithium salt of an inorganic (non-carbon) acid

66 such as bis(fluorosulfonyl)imide (GRI 1) .
 - 67 – Heading 28.26 (fluorides/complex fluorine salts) is examined but rejected

68 (see Section III), leading us back to the residual-but-still-specific salt basket

69 of 28.42 under GRI 1 and 3(a).
- 70 • Subheading level (GRI 6):

 - 71 – Under 28.42, subheading 2842.10 covers silicates/aluminosilicates; that is

72 not the case here.
 - 73 – Therefore, the subheading is 2842.90 “Other” (other salts of inorganic acids

74 not covered elsewhere) .

75 III. Exclusion of alternative headings within Chapters 28 and 29

- 76 • 28.11 (other inorganic acids and other inorganic oxygen compounds of nonmetals):

 - 77 – This heading covers acids themselves, not their metal salts. Chapter 28,

78 Note 5 directs metal salts to 28.26–28.42, with 28.42 as the default for

79 double/complex salts (GRI 1) .

- 28.26 (fluorides; fluorosilicates, fluoroaluminates and other complex fluorine salts):
 - The anion $\text{N}(\text{SO}_2\text{F})_2^-$ is not a fluoride (salt of HF) nor a “fluorosilicate/fluoroaluminate” type complex as named in the heading; the heading’s exemplars are complexes where fluorine acts as the coordinating anion around a central atom (e.g., $[\text{AlF}_6]^{3-}$, $[\text{SiF}_6]^{2-}$). Here, the product is a salt of an inorganic imide acid (with S–F in sulfonyl groups), not a fluoride or the named complex fluorine salts of 28.26. In the absence of a fit with the 28.26 text, classification proceeds to 28.42 per Note 5 and GRI 1 and 3(a) .
- 28.33–28.41 (named salts: sulfides, nitrites/nitrates, phosphates, carbonates, cyanides, etc.):
 - The anion is not among the named salt families of these headings, so they do not apply by their texts (GRI 1). The appropriate catch-all within the salts regime is 28.42 (other salts of inorganic acids) .
- 28.53 (including 2853.90 “other”) – expressly discarded:
 - Heading 28.53 primarily covers phosphides and, residually, “the other inorganic compounds”; its only specific subheading is 2853.10 (cyanogen chloride), with 2853.90 “other” for the remainder. However, Chapter 28 Note 5 mandates that metal salts are classified in 28.26–28.42 (and, unless otherwise specified, complex salts in 28.42). Because LiFSI is a lithium salt of an inorganic acid, it is covered more specifically by 28.42 (other salts of inorganic acids). Under GRI 1 and GRI 3(a), this specific salts heading prevails over the generic “other inorganic compounds” basket of 28.53; consequently, 2853.90 is legally inapplicable in the presence of 28.42 .
- 29.20 (esters of other inorganic acids of nonmetals and their salts):
 - This heading concerns esters and their salts; the product is not an ester of an inorganic acid. Therefore, 29.20 is inapplicable by text (GRI 1) .
- 29.25 (carboximide or imine function compounds):
 - Covers organic compounds (carboximide/imine) and their salts; LiFSI is an inorganic imide acid salt without carbon, thus outside the organic scope of Chapter 29 (see organic criterion cited supra) .

IV. Documentary requirements (to support and evidence the classification)

- Complete chemical name and CAS RN (171611-11-3); structural formula or IUPAC name.

- 113 • Technical data sheet (TDS) and safety data sheet (SDS) indicating composition,
114 purity, and physical form.
- 115 • Information confirming it is the lithium salt of the inorganic acid
116 bis(fluorosulfonyl)imide (no carbon in the anion).
- 117 • Manufacturing description (to confirm it is presented “separately” and of defined
118 chemical constitution per Note 1 to Chapter 28) .
- 119 • Photographs/packaging details and intended use (battery manufacturing) for
120 context (use is not determinative but can corroborate product identity).

121 V. Conclusion

- 122 • Legal basis: By GRI 1 and GRI 3(a), and Chapter 28 Notes (especially Note 5), the
123 product is a metal salt of an inorganic acid that is not covered by the named salt
124 headings (28.26–28.41). It is therefore classifiable in heading 28.42 “Other salts of
125 inorganic acids or peroxyacids,” subheading 2842.90 “Other” .
- 126 • Classification table (limited to subheading level as requested):
 - 127 – Chapter: 28
 - 128 – Heading: 28.42
 - 129 – Subheading: 2842.90
 - 130 – Mexican 8-digit tariff item (fraction): Not determined (scope limited to
131 subheading per instruction)
 - 132 – NICO: Not determined (scope limited to subheading per instruction)

133 Final determination: 2842.90

134 Note regarding 2853.90: Explicitly discarded because heading 28.53 (“Phosphides...; other
135 inorganic compounds”) is a generic residual provision. In contrast, the text of heading
136 28.42 specifically covers “the other salts of inorganic acids,” and Chapter 28 Note 5 directs
137 metal salts to 28.26–28.42—by default to 28.42 for double/complex salts—making 28.42
138 the proper and more specific heading under GRI 1 and GRI 3(a). Therefore, 2853.90 cannot
139 apply to this lithium salt of an inorganic acid .