

Adjustments to China's Catalog of Prohibited and Restricted Export Technologies

I. Prohibited Export Part

Building decoration, renovation and other construction industries

Delete the entry of Chinese traditional construction technology (No. 085001J).

II. Restricted Export Section

(I) Building decoration, renovation and other construction industries

1. Delete the entry for traditional Chinese construction technology (No. 085001X).
2. Delete the entry for Building Environmental Control Technology (No. 085002X).

(II) Chemical raw materials and chemical products manufacturing industry

Add battery cathode material preparation technology (No. 252604X) control points

Points:

"1. At the same time to meet the following conditions for the preparation of lithium iron phosphate battery technology

- (1) Chemical formula $\text{Li}_x\text{Fe}_{(y)\text{M}_z}\text{PO}_4$, where $x, y, z \geq 0$, M is in addition to Li, Fe other than

M is one or more elements other than Li and Fe.

- (2) The material has a compacted density of $\geq 2.58\text{g/cc}$ at 300MPa, a reversible capacity of $\geq 160\text{mAh/g}$ at 0.1C, and a first-time Coulomb efficiency of $\geq 97\%$.

2. Preparation technology of lithium manganese iron phosphate for batteries that simultaneously meets the following conditions

- (1) Chemical formula $\text{Li}_x\text{Fe}_y\text{Mn}_{(z)\text{M}_a}\text{PO}_4$, where $x, y, z, a \geq 0$, M is one or more elements other than Li, Fe, Mn

- (2) The material has a powder compacted density $\geq 2.38\text{ g/cc}$ at 300 MPa, 0.1 C

First Coulomb efficiency $\geq 90\%$, 0.1C Reversible capacity $\geq 155\text{mAh/g}$, 0.1C Average

voltage $\geq 3.85\text{V}$, 1C discharge capacity retention rate $\geq 97\%$, 2C discharge capacity retention rate

$\geq 95\%$, 2C discharge capacity retention rate $\geq 97\%$, 2C discharge capacity retention rate ≥ 95

3. Phosphate anode raw material preparation technology

(1) iron phosphate, ferromanganese phosphate, ferrous oxalate for batteries, lithium di(a)hydrogen phosphate for batteries, lithium phosphate for batteries preparation process, in which iron phosphate at the same time to meet the following conditions: the vibration density $> 2.1\text{g/cc}$, magnetic foreign matter $< 10\text{ppb}$ ".

(C) non-ferrous metal smelting and rolling processing industry

1. Modify Control Point 2 of Nonferrous Metals Metallurgy Technology (No. 083201X) to read: "Techniques and processes for extracting gallium metal from alumina mother liquor by ion-exchange method, resin method, etc.".

2. Add a new control point under Nonferrous Metallurgy Technology (No. 083201X):

"9. Lithium pyroxene lithium extraction to produce lithium carbonate technology

(1) Lithium carbonate technology based on lithium-containing purification liquid preparation

(2) Carbonization pyrolysis purification technology

(3) Mother liquor recycling technology

(4) Continuous production automatic control technology

(5) Lithium hydroxide carbonization technology

10. Lithium hydroxide production based on lithium pyroxene lithium extraction technology

(1) Preparation of lithium hydroxide based on lithium-containing purified liquid technology

(2) Freezing sodium precipitation technology

- (3) Evaporation crystallization technology
- (4) Continuous production automatic control technology
- (5) Crushing and drying technology

11. Lithium metal (alloy) and lithium material preparation technology

- (1) Multi-anode electrolysis technology
- (2) Lithium metal distillation and purification technology
- (3) Lithium metal (alloy) and lithium rolling processing technology

12. Raw halogen direct lithium extraction technology

- (1) Adsorbent material synthesis technology (aluminum system, titanium system, manganese system)
- (2) Brine adsorption lithium PID process, adsorption and membrane integration supporting devices and other technologies

13. Lithium-containing purification liquid preparation technology

- (1) Ion exchange technology
- (2) Lithium-containing solution in addition to B, Ca, K, Na, S and other technologies
- (3) Membrane separation, electrodialysis impurity removal technology".