

Next-Generation Solid Electrolyte Platform

Universal • Scalable • Safer • Dry-State

Robust and flexible license-ready technology, Applicable in batteries, microchips, supercapacitors, and more



Because the real revolution in batteries starts in the electrolyte.

Who are we and what do we offer?

What is SolidEnergetics?

Technology company specializing in advanced solid electrolyte formulations. Headquartered in Estonia and with international operations.

We don't manufacture batteries. We do not produce cells

- We provide a protected chemical formula, adaptable to multiple sectors.
- **Ready to be licensed to industrial manufacturers, R+D centers or OEM integrators.**
- Available in ceramic, paint and adaptable membrane formats.

Universal design, compatible with existing production lines

Our product is not a cell. It's the chemical foundation that unlocks the next generation of batteries.

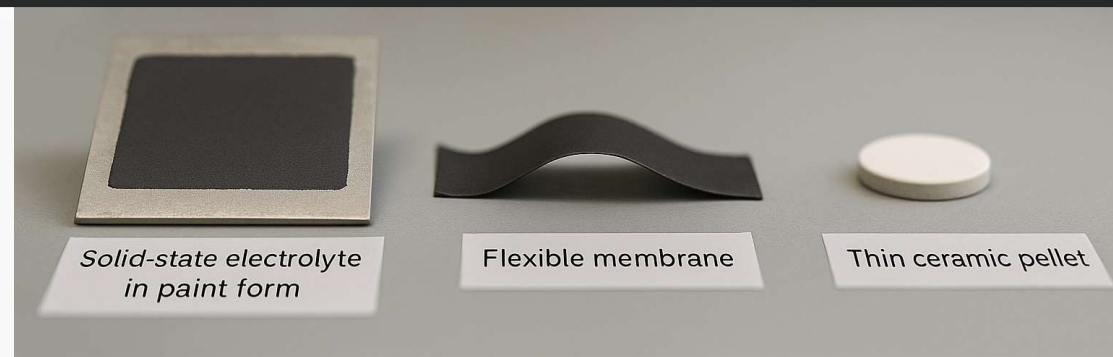
Why multiple formats?

- Paint: Easily applied by spray. Ideal for thin layers, internal coatings or rapid applications in laboratory or pilot line.
- Flexible or pressed membrane: Perfect for multilayer cells or modular assembly. Provides ionic continuity without the need for liquids or complex sealing.
- Ceramic: High density, ideal for thermal validation, pressure testing, and demanding environments. Compatible with standard coin-cell or pulsed cell techniques.

In addition to paint, membrane or ceramic, it can also be presented as a polymer, solid paste or multilayer film, depending on the industrial need.

Functional Formats of Solid Electrolyte

Available in various physical formats, adaptable to existing industrial processes

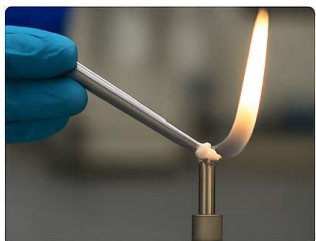


- Paint applicable spray, roller or brush.
- Flexible or pressed membrane.
- Ceramic for structural integration.

We do not sell these products. We provide the license, formula and technical guide for each company to manufacture and integrate into its own system.

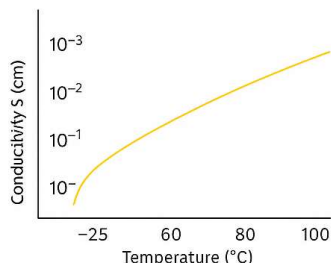
Operation and Safety

Thermal Protection



- Decomposes at 600 °C, one of the highest known
- Prevents thermal runaway in extreme conditions

Ionic Conductivity



- High conductivity from room temperature
- Dry electrolyte ideal for high-power applications

Dendrite Prevention



- Withstands high current density (5 mA/cm²)
- Reduces uniform lithium deposits & filaments

- 100% solid state: no gels, no liquids, no moisture.
- Non-flammable, non-toxic, no organic solvents.
- It operates at room temperature without a controlled atmosphere.
- It is sustainable and eco-friendly to the environment.

“Properties remain stable even after thermal cycling or prolonged exposure in open environments.”

Why is our electrolyte different?

Industrial compatibility

- It adheres directly to metals: copper, aluminium, lead...
- It does not require primer, plasma or complex processes.
- Compatible with conventional production lines.

Stability and performance

- Withstands up to 120°C without degradation or deformation.
- High dry ionic density (>10⁻³ S/cm).
- Allows stable cycles in prototypes with lithium metal.

Application versatility

Can be used as a separator + electrolyte at the same time
 No pressure applied: useful for coin-cell, or rigid structures.

Functional validation across multiple systems and devices

Lithium-metal batteries

- Tested on more than 30 LFP, NMC, LCO prototypes.
- Up to 600 stable cycles without dendrites.
- Dry running, room temperature, no need for sealing.

Solid capacitors / SMD

- Applied as a conductive paint, ceramic or functional membrane.
- Maintains charge in ambient air without encapsulation.
- Adheres directly to metal or polymer without primer.

Printed Circuits and Resistive Elements

- LED-Loaded Activated Functional Circuits
- Maintains conductivity in flexible, dry layers
- Works even with cuts or direct exposure to the environment

"The same formulation adapts without modification to devices with different geometry, size or electrical requirements."

Solid Electrolyte Applications



**Lithium-metal
battery**



**Solid
capacitor**



**Flexible
printed circuit**

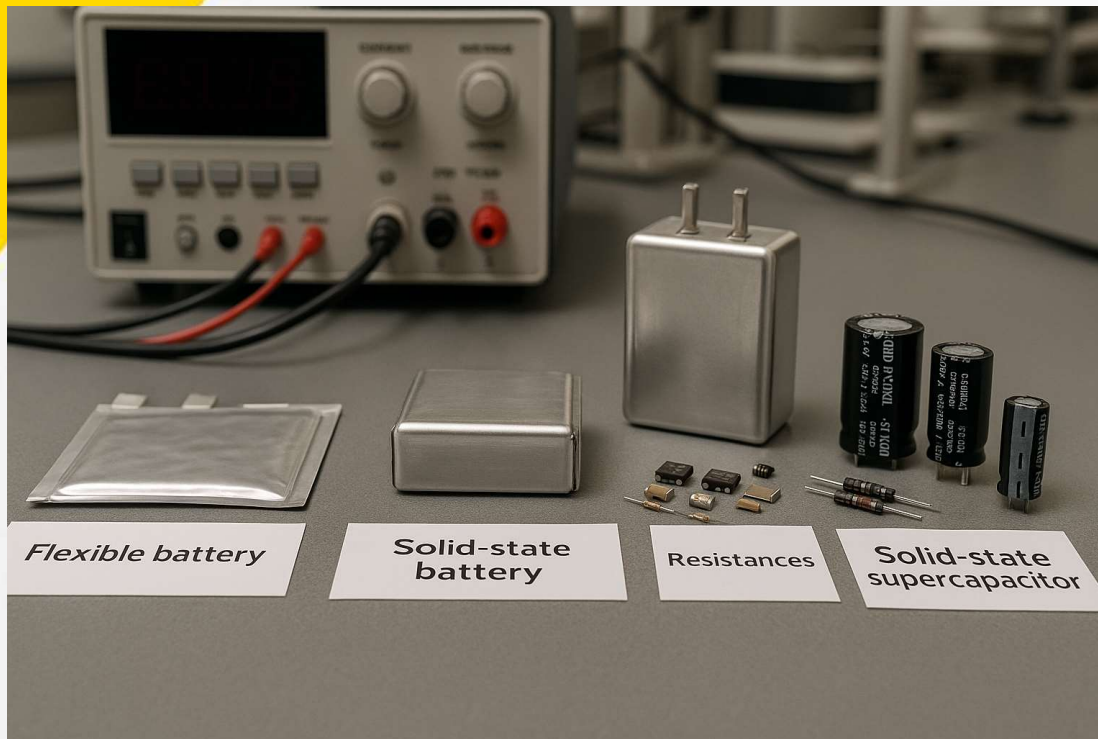
These tests show that the solid electrolyte from Solid Energetics can now be integrated into real devices without the need to redesign processes or materials. One Formula, Multiple Applications. Successfully validated in commercial systems without controlled atmosphere or pressure.

One Formula, Multiple Real Applications

Unlike other solutions designed for only one cell type or voltage, our base formulation adapts to different chemistries and architectures.

It can be used on:

- Cells with metallic lithium, graphite, NMC, LFP, sodium, silicon...
- Solid-state, semi-solid or hybrid batteries, dual AA and more.
- Solid-state capacitors, SMDs, supercapacitors.
- Microdevices, sensors, wearables, and printed electronics.
- Low, medium or high voltage applications.



A versatile formula, designed to adapt:

The customer adjusts the composition according to their system: from lithium cells to sensors, SMD, or stationary storage, adapting to market demands, and developing new products.

"It allows new products to be developed from laboratory tests to industrial series, adjusting only the key parameters without changing the application method.

The base formula is maintained, but the salts and additives are adjusted according to the electrochemical system. This allows for easy integration into any architecture without reworking from scratch.

Universal formula, adaptable by composition

Access to, multiple real sectors:

Compatible with lithium, sodium, sensors, drones or fixed storage.
A single solution ready for production and dual markets.



**Automotive &
Transportation**



**Solar and
Consumer Energy**



**Capacitors &
Electronics**



**Aerospace
Technology**



**Military
Technology**



**Drones and
Agriculture**



Technology Naval



**Robotic
technology**



Medical devices



**Construction &
Machinery**



**Consumer
Electronics**



**Conventional
batteries**



**Colonization
Planetary**



Railway Industries

The base formula is adjusted according to the chemical system. It integrates without redesigns, from micro devices to tactical drums. Ideal for industrial adoption in critical and civil sectors.

Low cost and ease of manufacturing

The formula is designed to scale without changing anything.

It does not need reformulations or process reengineering. The same compound can go from trial to pilot and industrial line without technical leaps or additional investment.



The electrolyte can be dispersed in different carrier media, allowing it to be used as a paint, paste or pressed layer according to the manufacturer's need. This makes it a solution adaptable to both automated lines and artisanal production or rapid prototyping.

Raw materials

- Non-dangerous.
- Commercially available.
- Adaptable according to region or supplier.

Save on manufacturing

- Applicable in thinner layers. Reduces weight, space consumption and auxiliary materials.
- No dry atmosphere required.
- No cleanroom needed. That, on a large scale, saves millions.
- Compatible with existing lines.
It does not force you to redesign processes or invest in new machinery.

For years, the sector has been
Caught between extremes:

- Promising technologies, but unfeasible.
- Industrial solutions, but obsolete.
- High production costs.

Our electrolyte breaks that dilemma:

For the first time, there is a technology that
simultaneously complies with:

- Laboratory requirements.
- Industrial production requirements.
- Expectations of real manufacturers.
- Different applications of the same formula.
- Ready for immediate manufacture and production.

With Solid Energetics, the manufacturer
Not only adopt a solution:

- It makes it your competitive advantage.
- One Formula, Different Applications.

The turning point the market has been waiting for

northvolt

BANKRUPT

QuantumScape

PROTOTYPE

Solid
Power

PROTOTYPE

 **SOLID ENERGETICS**
ECO TECHNOLOGIES

**READY
NOW**

We are not competing with what is in the market

We're creating a new standard

One in which security, scalability and compatibility are
not options, but minimum conditions.

It's no longer about how efficient it is.
It's about who will adopt it first.

Available forms of collaboration

We adapt the agreement to the profile and objectives of each strategic partner

- **Exclusive or Non-Exclusive License:**

By sector (automotive, defense, SMD...) or region (Asia, Europe, America). Ideal for manufacturers looking to differentiate themselves without acquiring the technology entirely.

- **Industrial co-investment for scaling:**

Joint collaboration to validate in pilot line or adapt to own systems.
It allows the implementation of technology to be shared and reinforced in current systems.

Strategic decisions do not wait.

Whoever formalizes now, ensures a position of technological leadership in their sector.

"Industries that act first will ensure functional exclusivity in critical applications such as automotive, defense or consumer electronics."

- **Total or partial sale of the technology:**

Option of definitive acquisition or by percentages, with immediate transfer of rights. Suitable for investment funds or industrial groups that want to consolidate technological property.

- **Strategic agreement with sharing of rights**

Hybrid model: investment, partial exclusivity and participation in future improvements.
Recommended for projects with a long-term vision or joint development of derivatives.

The priority access window is still open but not for long. We are carefully selecting the partners who will lead the adoption.



Thank you for your attention.

**"Our technology is already operational.
Now the difference will be made by who
knows how to integrate it first."**

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Solid-State Electrolyte: General Information and Industry Integration Report

