

# Li SOCl<sub>2</sub> lithium battery

What is a Li-SOCI 2 battery?

Jauch's Li-SOCI 2 batteries are available in many different sizes and forms and can be used in a diverse range of end products. At 3.6 volts, the cell voltage of Li-SOCI 2 batteries is significantly higher than the voltage level of other primary battery types.

Are lithium thionyl chloride batteries rechargeable?

Lithium thionyl chloride (Li-SOCI 2) batteries are not rechargeable. They belong to the category of primary or non-rechargeable batteries. This means that once they have been fully discharged, they cannot be recharged and reused. EaglePicher is one of the leading lithium thionyl chloride battery manufacturers.

Who makes lithium thionyl chloride batteries?

Notable manufacturers like Tadiran Batteries produce high-quality Li-SOCI<sub>2</sub> batteries. At the same time, Ufine Battery offers rechargeable lithium-ion batteries that are more environmentally friendly and can provide tailored energy solutions. What are the main features of lithium thionyl chloride batteries?

How many watts can a lithium thionyl chloride battery run?

Values up to 710 watt-hours/kilogram are possible. Constant voltage: Li/SOCI<sub>2</sub> batteries deliver a constant voltage of 3.6 volts until almost complete discharge. Lithium thionyl chloride batteries are used wherever low currents are required over a long period of time.

Are Jauch lithium thionyl chloride batteries good?

Temperature: Li/SOCI<sub>2</sub> batteries from Jauch reliably deliver high voltages even at double-digit sub-zero temperatures. Lithium thionyl chloride batteries are very durable and have a very good shelf life. The self-discharge rate of only 1% per year speaks for itself.

What is the difference between lithium ion and lithium thionyl chloride batteries?

What is the difference between lithium-ion and lithium-thionyl chloride batteries? Lithium-ion batteries are rechargeable and commonly used in consumer electronics, while lithium-thionyl chloride batteries are non-rechargeable. They have higher energy density and longer shelf life and are suitable for industrial and medical applications.

single cells and multi-cell battery systems Page 2 2. HAZARD IDENTIFICATION The Li-SOCI 2 batteries described in this Battery Information Sheet are sealed units which are not hazardous under normal operating conditions in accordance with manufacturer's recommendations, as stated in the user's manual or other similar documentation.

In the ever-evolving world of battery technology, two types of batteries have gained significant attention for their unique properties and applications: the Tadiran lithium thionyl chloride (Li-SOCI<sub>2</sub>) battery and the



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lithium polymer (Li-Po) battery. While both utilize lithium-based chemistry, these power sources serve distinctly different purposes in various industries.

Saft's LS, LSH and LSP cylindrical primary lithium cells ranges, all based on Lithium-Thionyl chloride (Li-SOCl<sub>2</sub>) chemistry perfectly suit high-energy and high-voltage requirements in a wide range of temperatures.

Li-SOCl<sub>2</sub> batteries, also known as lithium thionyl chloride batteries, are renowned for their impressive features, making them a popular choice in various industries. One of the standout qualities of these batteries is their exceptional energy density.

Li-SOCl<sub>2</sub> Battery: Li-SOCl<sub>2</sub> batteries use lithium as the anode and thionyl chloride (SOCl<sub>2</sub>) as the cathode, with lithium tetrachloroaluminate (LiAlCl<sub>4</sub>) as the electrolyte. The chemical reactions involved are quite different from Li-ion batteries. 2. Energy Density: a. Li-ion Battery: Li-ion batteries have a relatively high energy density, making ...

This Battery Information Sheet is provided solely as information document for the purpose of assisting our customers. 1. IDENTIFICATION 1.1 Product Lithium-thionyl dichloride primary unit cells and multi-cell battery systems composed of these cells 1.2 Supplier Headquarters Address Phone/Fax Saft S.A.S.

There are several factors to consider when selecting a lithium thionyl chloride (Li-SOCl<sub>2</sub>) battery. Some of the key considerations include: Size and shape: Li-SOCl<sub>2</sub> batteries are available in a range of sizes and shapes, and the right size and shape will depend on the specific requirements of your application.

As a result, the as-assembled lithium-sulfur battery delivered an ultra-high discharge capacity (2202.3 mA h g<sup>-1</sup> at 400 mA g<sup>-1</sup>) and excellent rate performance (1348.6 mA h g<sup>-1</sup> at 3000 mA g<sup>-1</sup>), as well as remarkable cycling performance. This study reveals an effective avenue to suppress the Li-dendrites growth and provide a ...

HCB offers high quality ER14505 Li-SOCl<sub>2</sub> Lithium Thionyl Chloride 3.6 v size aa primary battery to clients all over the world. It can be used for smoke detectors, security alarms, seismometers, locking systems, monitoring systems, etc. Get Our Catalog Now!

Practical energy densities over 200 Wh kg<sup>-1</sup> have been attained in several primary battery paradigms, such as Li thionyl chloride (Li-SOCl<sub>2</sub>), Li sulfur dioxide (Li-SO<sub>2</sub>), Li manganese dioxide (Li-MnO<sub>2</sub>), Li iron disulfide (Li-FeS<sub>2</sub>), Li fluorinated carbon (Li-CF<sub>x</sub>), and Li iodine (Li-I<sub>2</sub>) batteries (Figure 1 A). 4 An energy density of 710 Wh ...

Lithium Thionyl Chloride Li-SOCl<sub>2</sub> 3.6 ER battery is a primary (non-rechargeable) battery that is well known for the highest voltage (3.6V) and high energy density, super long shelf life and the ability to operate in a wide temperature range.

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How do Li-SOCl<sub>2</sub> Tadiran Batteries Work? Li-SOCl<sub>2</sub> battery technology takes advantage of the high reactivity of lithium, the lightest of all metals, and a highly electronegative chlorinated compound, thionyl chloride (SOCl<sub>2</sub>). Two types of Li-SOCl<sub>2</sub> battery structures. Image credit [gebc-energy](#). In these batteries, lithium serves as the anode, and thionyl chloride ...

The commercial battery with the highest energy density is the lithium-thionyl chloride (Li-SOCl<sub>2</sub>) battery. Developed in the 1970s, this non-rechargeable battery is still widely deployed in military, space, utility metering and GPS tracking applications. It uses thionyl chloride as the catholyte, lithium metal as the anode and amorphous carbon as the cathode.

The "ER" series lithium battery include cylindrical and button outline. It is one of primary. LiSOCl<sub>2</sub> battery, Abbreviated as the "ER" series by the IEC. The "ER" series lithium battery include cylindrical and button outline. It is one of primary ... All batteries based on Lithium-Thionyl chloride (Li-SOCl<sub>2</sub>) chemistry perfectly suit high-energy ...

**TADIRAN INDUSTRIAL GRADE LITHIUM BATTERIES TADIRAN BATTERIES GO WHERE OTHERS DON'T DARE** Pound for pound, Tadiran bobbin-type lithium thionyl chloride (LiSOCl<sub>2</sub>) cells are the most energetic and reliable batteries in the world: delivering unrivaled energy density, high capacity, and high pulse capability to power increasingly sophisticated technologies. Our ...

Li/SOCl<sub>2</sub> cells are regarded as Class 9 Hazardous Materials by the United Nations/Department of Transportation, and classified under UN3090 Lithium Metal Batteries or UN3091 Lithium Metal Batteries Contained Within Equipment. Therefore, tests are required to Section 38.3 of the UN Manual of Tests and Criteria (i.e. Altitude, Thermal, Vibration,

The Saft LS33600 D 3.6V Li-SOCl<sub>2</sub> Lithium Battery is a high-capacity cell designed for long-term use in demanding industrial applications. This D-sized battery combines high energy density with a stable 3.6V voltage platform, making it an ideal choice for ...

What Are Lithium Thionyl Chloride Batteries? Lithium thionyl chloride or Li-SOCl<sub>2</sub> are primary cell batteries. In this case, electrolyte based on sulfonated thionyl chloride serves as the positive electrode. The main difference between this and other lithium battery types is that this type cannot be recharged once discharged.

Lithium thionyl chloride (Li-SOCl<sub>2</sub>) batteries, or ER batteries, are a main member of the lithium primary battery family. ER batteries use lithium metal as anode (negative) and a mixture of carbon and thionyl chloride (SOCl<sub>2</sub>) as cathode (positive). It is well known as its highest voltage (nominal 3.6V) and highest energy density. ...

Amazon : [EEMB ER34615 Nonrechargeable 3.6V Lithium Battery with Tabs Li-SOCL<sub>2</sub> D Size 19000 mAh](#)



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High Capacity UL Certified Single-Use 3.6V Lithium Thionyl Chloride Battery DO NOT Charge Battery : Health & Household ... Lithium-Thionyl Chloride (Li-SOCl<sub>2</sub>) Recommended Uses For Product: Meter, Sensor: Unit Count:

How do Li-SOCl<sub>2</sub> Tadiran Batteries Work? Li-SOCl<sub>2</sub> battery technology takes advantage of the high reactivity of lithium, the lightest of all metals, and a highly electronegative chlorinated compound, thionyl chloride ...

HCB offers high quality ER18505 Li-SOCl<sub>2</sub> Lithium Thionyl Chloride primary battery to clients all over the world. It has high and stable voltage, energy density up to 590Wh/kg, long shelf life and wide operating temperature. ... ER18505 Li-SOCl<sub>2</sub> Cylindrical Lithium Battery 3.6V 4000mAh A-size ER18505 cylindrical primary lithium battery for smart ...

Lithium thionyl chloride (Li/SOCl<sub>2</sub>) battery is a primary lithium battery type yet superior to other disposable cells is commonly used in remote applications, industrial and medical purposes. These include electric power, IC power source, RFID, gas meters, water, and other related uses.

Lithium Based Batteries | Coursera. This course is part of Battery Technologies Specialization. Instructor: Arunachala Nadar Mada Kannan. Enroll for Free. Starts Nov 6. Financial aid available. 3,582 already enrolled. o. Included with. 4 ...

March 2023 - Version 2.2 - Li-SOCl<sub>2</sub> single cells and multi-cell battery systems Battery Information Sheet Primary Li-SOCl<sub>2</sub> single cells and multi-cell battery packs According to REACH regulation (EC 1907/2006, Art 31) and to OSHA regulation (29 CFR 1910.1200), batteries are ARTICLES with no intended release. As such, they are not covered

8 Pack LS14500 AA 3.6V Li-SOCl<sub>2</sub> Lithium 2600MAH Batteries Use for Security System Device PLC Facility Batteries (8 Pack Included) \$48.99 \$ 48. 99 (\$6.12 \$6.12 /Count) \$46.54 with Subscribe & Save discount. FREE delivery. Add to cart-Remove. EEMB.

as the Li-SOCl<sub>2</sub> (Lithium-Thionyl Chloride), can still provide advantages for the user, including high energy density, instant readiness, low self-discharge, reasonable lifetimes ... Lithium Thionyl Chloride or other batteries which have flat discharge curves. Another method for estimating the state of charge involves applying a load and

Li-SOCl<sub>2</sub> Material safety Data Sheet. Electronically generated document - no signature required . 9 Rev. 1 Jan 2021. Thionyl chloride (SOCl<sub>2</sub>) 40-46% ... use lithium batteries inside label. For the single cell batteries and multicell battery packs which are restricted to transport (assigned to Class 9), use Class 9 Miscellaneous Dangerous Goods

The SAFT LS14250 is a 1/2 AA size lithium-thionyl chloride (Li-SOCl<sub>2</sub>) primary battery with the following



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key features: Nominal Voltage: 3.6V, Capacity: 1.2Ah, Battery Size: 1/2 AA, Chemistry: Primary Li, Thionyl Chloride/Li-SOCl<sub>2</sub>, Applications: Utility metering, alarms, security devices, electronic fences, memory backup, computer real-time clocks, tracking systems, professional ...

Lithium thionyl chloride batteries (Li/SOCl<sub>2</sub>) belong to the lithium primary cell family. Unlike lithium ion or lithium polymer batteries, these cells cannot be recharged once they have ...

Web: <https://www.ekusenitours.co.za>