SOLAR Pro.

Regulations restricting the use of lead-acid batteries

What is the new battery regulation?

The Regulation entered into force on 17 August 2023 and repeals the Batteries Directive (Directive 2006/66/EC). It continues to restrict the use of mercury and cadmium in batteries and introduces a restriction for lead in portable batteries. It also aims to: reduce environmental and social impacts throughout the entire battery life cycle.

Will lead-acid batteries be exempted?

It is anticipated that similar exemptions will be sought and potentially grantedfor lead-acid batteries, particularly for automotive and industrial applications. Such exemptions could extend the usage of lead-acid batteries for up to seven years, suggesting a phased transition by the early 2030s.

Are lead-acid batteries recyclable?

The targets for recycling efficiency of lead-acid batteries are increased, and new targets for lithium batteries are introduced, in light of the importance of lithium for the battery value chain. In addition, specific recovery targets for valuable materials - cobalt, lithium, lead and nickel - are set to be achieved by 2025 and 2030.

Why should batteries be regulated in 2020?

The global demand for batteries is increasing rapidly and is predicted to have a 14-fold increase by the year 2030. To minimise the environmental impacts of this growthand considering changes in society,new technological developments,markets and the uses of batteries,the European Commission proposed a new Batteries Regulation in 2020.

What are battery safety requirements?

These include performance and durability requirements for industrial batteries, electric vehicle (EV) batteries, and light means of transport (LMT) batteries; safety standards for stationary battery energy storage systems (SBESS); and information requirements on SOH and expected lifetime.

What is a battery regulation & why is it important?

The regulation is part of the EU's shift to a circular economy, an important aspect of the European Green Deal (see summary), and will increase security of supply for raw materials and energy, along with enhancing the EU's strategic autonomy and competitiveness. Scope The regulation applies to all batteries, including all:

Restrictions on hazardous substances: The battery regulation includes strict limits on harmful substances such as mercury, cadmium, and lead, to minimise environmental and health risks. This is in line with broader EU policies to ...

The new EU Battery Regulation (EU 2023/1542) has significant implications for the use of lead-acid batteries

SOLAR Pro.

Regulations restricting the use of lead-acid batteries

in these critical applications. This guidance provides an in-depth analysis of the regulation and its impact, supported by expert insights and guidance.

Following my recent article forecasting the extinction of lead-acid batteries, a lead acid battery association took exception to my arguments. Here is their position on the issue.

Lead-acid batteries come in different types, each with its unique features and applications. Here are two common types of lead-acid batteries: Flooded Lead-Acid Battery. Flooded lead-acid batteries are the oldest and most traditional type of lead-acid batteries. They have been in use for over a century and remain popular today. Flooded lead ...

LiFePO4 batteries significantly reduce overall weight compared to traditional lead-acid batteries, often by up to 70%. This weight reduction improves the vessel's balance and stability, enhancing performance and fuel efficiency. Additionally, their compact design allows for flexible placement options, further optimizing the boat's center of gravity.

The regulation includes performance, durability and safety criteria which cover restrictions on hazardous substances like mercury, cadmium and lead, and mandatory information on the ...

Lead: Starting from 18 August 2024, portable batteries must not exceed 0.01% lead (as lead metal) by weight. Zinc-air button cells are exempt from this restriction until 18 August 2028.

The Commission proposes that existing restrictions on the use of hazardous substances in all battery types are maintained, in particular for mercury and cadmium. Furthermore, as of 1 July ...

Restrictions on hazardous substances: The battery regulation includes strict limits on harmful substances such as mercury, cadmium, and lead, to minimise environmental and health risks. This is in line with broader EU ...

The Regulation entered into force on 17 August 2023 and repeals the Batteries Directive (Directive 2006/66/EC). It continues to restrict the use of mercury and cadmium in ...

rates in the use of lead-acid batteries are to be expected. Studies carried out in Botswana indicate that the number of batteries used in the automobile sector will grow by 40-50% over the period from 1995 to 2005 (source: GTZ waste management project). If we consider China alone, the most populous country of the world, which currently starts to introduce private car transport, it ...

49 CFR 173.185 - U.S. Lithium Battery Regulations. Click here. o 49 CFR 172.102 - Special Provisions 130 and 340 applicable to dry cell batteries and nickel metal hydride batteries. Click here. o 49 CFR 173.159, 173.159a - U.S. Lead Acid Battery Regulations. Click here, and here. Shippers of batteries and battery-powered products also should note that all batteries, ...

SOLAR Pro.

Regulations restricting the use of lead-acid batteries

Lead is a silvery grey metal that has been used for centuries because of its resistance to corrosion and malleability. It is one of the most used materials in different industries such as electric, automotive and construction. However, it is well known that exposure to lead can have detrimental effects on health and the environment.. Despite lead still being used in ...

In 2018, lead-acid batteries (LABs) provided approximately 72 % of global rechargeable battery capacity (in gigawatt hours). LABs are used mainly in automotive applications (around 65 % of global demand), mobile industrial applications (e.g. forklifts and other automated guided vehicles) and stationary power storage.

The global lead-acid battery industry is worth about \$65 billion annually, but when used batteries are recycled, the process has been identified as the most polluting in the world.

The new EU Battery Regulation (EU 2023/1542) has significant implications for the use of lead-acid batteries in these critical applications. This guidance provides an in-depth analysis of the regulation and its impact, ...

Web: https://degotec.fr