



SAFETY INFORMATION SHEET

SLI STARTER LEAD-ACID BATTERIES

Release date: 29/05/2026

Release nr.: 5 (corrected)

EU

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FQS SLI STARTER BATTERY

Product safety information for flooded lead-acid starter batteries

Trade name	FQS SLI STARTER BATTERY
Battery technology	Flooded lead-acid starter battery (SLI), liquid electrolyte, vented design
Article category	AC3 - Electrical batteries and accumulators
Supplier	Freedom Quality Services SL - FQS BATTERY CIF: B91870618 C/ Laminadora 36, 41016 Sevilla, Spain Tel.: +34 954 518 882 www.fqsbattery.com
Information contact	marketing@fqsbattery.com
Emergency telephone	Spain: Servicio de Informacion Toxicologica +34 91 562 04 20. For other countries, contact the local poison centre or emergency services.
Model references	FQS44.0, FQS55.0, FQS55A.0, FQS62.0, FQS70.0, FQS74.0, FQS74A.0, FQS78.0, FQS90.0, FQS100.0, FQS100.1, FQS45A.0, FQS45.0, FQS45.1, FQS60A.0, FQS60.0, FQS60.1, FQS75A.0, FQS75B.0, FQS75.1, FQS80A.0, FQS80B.0, FQS80A.1, FQS95.0, FQS95A.0, FQS95.1, FQS110SF.0, FQS40BF.0, FQS40BFST.0, FQS40BF.1, FQS45BF.0, FQS45BF.1, FQS50BF.0, FQS62JP.0, FQS62JP.1, FQS80.0, FQS80.1, FQS105JP.0, FQS105JP.1, FQS50PL.0, FQS55PL.0, FQS65PL.0, FQS68PL.0, FQS80PL.0, FQS85PL.0, FQS90PL.0, FQS95PL.0, FQS100PL.0, FQS100BC.1, FQS110.0, FQS110.1, FQS110T.0, FQS140.3, FQS140.4, FQS135.3, FQS140JD.0, FQS148.0, FQS148.1, FQS165.0, FQS165NATO.2, FQS180.3, FQS180.4, FQS180T.4, FQS230.3, FQS230.4, FQS145SHD.3, FQS190SHD.3, FQS240SHD.3, FQS66S.0, FQS77S.0, FQS84S.0, FQS140S.0, FQS160S.0, FQS30.0, FQS30.1, FQS32.0, AUX1, AUX2, AUX3, AUX4, AUX5, AUX6, FQS16PP.0, GEL12-22, FQS1200A, FQS160SOLAR, FQS215SOLAR, FQS250SOLAR, FQS300SOLAR

SECTION 1: Identification of the article and of the company/undertaking

1.1 Product identifier	FQS SLI STARTER BATTERY
Article number	Not assigned in this sheet. See model references above.
1.2 Relevant identified uses	Automotive starter battery for starting, lighting and ignition functions in vehicles where the SLI battery specification is suitable for the vehicle.
Uses advised against	Do not open, disassemble, deform, incinerate, short-circuit, reverse polarity, overcharge, deep-discharge intentionally, use an unsuitable charger, or use in applications outside the battery specification.
1.3 Supplier	Freedom Quality Services SL - FQS BATTERY CIF: B91870618 C/ Laminadora 36, 41016 Sevilla, Spain Tel.: +34 954 518 882 E-mail: marketing@fqsbattery.com
1.4 Emergency telephone	Spain: Servicio de Informacion Toxicologica +34 91 562 04 20. For emergencies outside Spain, contact the local poison centre or emergency services. Only use a 24-hour international emergency response number if a valid service contract is in place.



SAFETY INFORMATION SHEET

SLI STARTER LEAD-ACID BATTERIES

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EU

SECTION 2: Hazards identification

2.1 Classification	The finished battery is an article. It is not classified as a hazardous substance or mixture under Regulation (EC) No 1272/2008 (CLP) when intact and used as intended.
Hazards if damaged or misused	If the container is damaged, opened, tipped, overheated, overcharged or leaking, exposure to sulphuric acid electrolyte and lead-containing components may occur. During charging, hydrogen and oxygen can be generated and may form an explosive atmosphere if ventilation is insufficient.
2.2 Label elements	No CLP hazard pictogram, signal word or hazard statement is required for the intact article. Battery marking, polarity marking, recycling symbol, Pb marking and crossed-out wheeled bin marking must be applied where required by battery legislation.
2.3 Other hazards	Short-circuit can cause high current, heat, burns or fire. Electrolyte is corrosive. Lead-containing components are hazardous to health and the environment if released. PBT/vPvB assessment is not applicable to the finished article.

SECTION 3: Composition/information on ingredients

The battery is an article. The components listed below are contained inside the battery and are not expected to be released during normal handling and intended use.

Component	CAS / EC	Typical content	Relevant classification / notes
Lead, lead alloys and lead compounds in plates, grids and active material	CAS 7439-92-1 / EC 231-100-4 for metallic lead	Approx. 50-75 %	Lead massive may be classified as Repr. 1A, H360FD; Lact., H362. Lead is listed as an SVHC candidate substance.
Sulphuric acid electrolyte	CAS 7664-93-9 / EC 231-639-5	Approx. 20-40 %	Skin Corr. 1A, H314. Concentration and density vary with state of charge.
Polypropylene casing, separators, additives and other battery components	Various	Balance	Not classified as released during normal use.

During charging, hydrogen and oxygen gases may be generated. The composition of a specific battery may vary depending on capacity and design.

SECTION 4: First aid measures

First aid is mainly relevant if electrolyte leaks, the battery ruptures, or combustion products are inhaled. Remove the person from exposure and seek medical attention when symptoms persist or when eye contact, ingestion or significant skin contact has occurred.

After inhalation	Move the affected person to fresh air. Keep at rest and warm. If breathing is difficult, seek medical attention. If unconscious, place in recovery position and obtain urgent medical assistance.
After skin contact	Remove contaminated clothing, shoes and jewellery. Rinse skin immediately with plenty of water for at least 15 minutes. Wash with soap after thorough rinsing. Seek medical attention for burns, irritation or pain.
After eye contact	Rinse cautiously with clean running water for at least 15 minutes, holding eyelids open. Remove contact lenses if present and easy to do. Obtain immediate medical attention.



SAFETY INFORMATION SHEET

SLI STARTER LEAD-ACID BATTERIES

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Release nr.: 5 (corrected)

EU

After ingestion	Rinse mouth with water. Do not induce vomiting. Do not give anything by mouth to an unconscious person. Obtain immediate medical attention.
Most important symptoms/effects	Sulphuric acid may cause severe skin burns, eye damage, respiratory irritation and gastrointestinal burns. Lead exposure is not expected from intact batteries, but released lead-containing dust or residues should be avoided.
Notes for doctors	Treat symptomatically. Exposure is normally to sulphuric acid electrolyte if a battery is damaged or leaking.

SECTION 5: Firefighting measures

Suitable extinguishing media	Use extinguishing media suitable for the surrounding fire: water spray or fog, foam, dry chemical powder or CO ₂ . If electrical equipment is energised, use media appropriate for electrical fires until power is isolated. Cool batteries exposed to fire with water spray from a safe distance.
Unsuitable extinguishing media	Avoid direct high-pressure water jet that may spread acid or damaged materials. Do not apply water directly to live electrical installations unless safe to do so.
Special hazards	During fire, damaged batteries may release sulphur oxides, lead oxides, acid mist, carbon monoxide, carbon dioxide and other decomposition products. Charging or overheated batteries may release hydrogen, which can form explosive mixtures with air.
Advice for firefighters	Wear self-contained breathing apparatus and full protective clothing. Avoid inhalation of fumes. Prevent contaminated firefighting water from entering drains or the environment.

SECTION 6: Accidental release measures

Personal precautions	Keep unauthorised persons away. Avoid contact with leaking electrolyte. Provide ventilation. Wear acid-resistant gloves, eye/face protection and protective clothing when handling damaged or leaking batteries.
Environmental precautions	Prevent electrolyte and lead-containing residues from entering drains, watercourses, soil or groundwater.
Containment and cleaning	Place damaged batteries upright in an acid-resistant container. Absorb small spills with inert absorbent material. Carefully neutralise acid with soda ash, sodium bicarbonate or lime. Collect residues as hazardous waste.
Reference to other sections	See sections 7 and 8 for safe handling and PPE. See section 13 for disposal.

SECTION 7: Handling and storage

7.1 Safe handling	Keep batteries upright. Protect terminals against short-circuit. Use insulated tools where appropriate. Keep away from sparks, flames and smoking. Do not open, dismantle, puncture, crush, deform, incinerate or expose to excessive heat. Observe correct polarity. Do not overcharge. Charge only with chargers and procedures suitable for SLI lead-acid batteries, in a well-ventilated area.
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SAFETY INFORMATION SHEET

SLI STARTER LEAD-ACID BATTERIES

Release date: 29/05/2026

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EU

Charging precautions	Hydrogen may be generated during charging. Ensure ventilation, avoid ignition sources, and follow the charger and battery instructions. Disconnect the charger before connecting or removing terminals where required by the charger instructions.
7.2 Storage conditions	Store upright in a cool, dry, covered and well-ventilated place. Recommended storage temperature: 5-30 deg C. Recommended relative humidity: below 80 %. Protect from direct sunlight, rain, excessive heat and freezing. Keep batteries secure against falling or mechanical damage.
Common storage	Keep away from strong alkalis, oxidising agents and materials that may react with sulphuric acid if leakage occurs. Avoid storage with metal objects that may bridge terminals.
7.3 Specific end use	Use only as a vehicle starter battery within the applicable technical specification and installation instructions.

SECTION 8: Exposure controls/personal protection

No exposure to lead or electrolyte is expected during normal handling of intact batteries. Exposure control measures are required when batteries are damaged, leaking, opened, recycled or involved in fire.

Substance	Indicative occupational exposure information	Comment
Sulphuric acid mist	EU IOELV long-term value: 0.05 mg/m ³ (thoracic fraction). Check national limit values.	Relevant only if mist/aerosol is generated, for example during charging abuse, leakage, filling or recycling.
Lead and inorganic lead compounds	Observe applicable national occupational exposure and biological limit values.	Not expected during normal use of intact batteries; relevant during recycling or operations that generate dust/fume.

Engineering controls	Provide adequate ventilation during charging and when handling damaged or leaking batteries. Use local extraction where acid mist, lead dust or fumes may be generated.
Respiratory protection	Not required for normal handling of intact batteries. Use suitable respiratory protection if ventilation is insufficient or if acid mist, smoke, dust or fumes may be present.
Hand protection	For damaged or leaking batteries, wear acid-resistant gloves such as nitrile, neoprene or PVC gloves compliant with applicable standards.
Eye/face protection	Wear safety goggles or a face shield when handling damaged or leaking batteries or when there is a risk of acid splash.
Skin/body protection	Wear acid-resistant protective clothing and footwear if leakage or splash risk exists.
Hygiene measures	Do not eat, drink or smoke when handling damaged batteries. Wash hands after handling. Remove contaminated clothing and clean before reuse.

SECTION 9: Physical and chemical properties

Physical state	Solid article: battery containing liquid sulphuric acid electrolyte.
Colour	Typically black/grey battery casing with product labelling.
Odour	Odourless under normal conditions.

pH	Not applicable to the finished article. Electrolyte is strongly acidic, typically pH < 1.
Flash point / flammability	Not applicable to the finished article. The battery is not self-igniting. Hydrogen generated during charging is highly flammable.
Explosive properties	The intact product is not explosive. Hydrogen/oxygen gas mixture may be explosive if generated during charging in insufficient ventilation.
Relative density	Not determined for the finished article. Electrolyte density varies with state of charge.
Solubility	Battery article: insoluble. Sulphuric acid electrolyte is miscible with water.
Other data	Melting point, boiling point, vapour pressure, viscosity and partition coefficient are not applicable to the finished article.

SECTION 10: Stability and reactivity

10.1 Reactivity	No hazardous reactivity during normal use. Short-circuit can cause rapid heating and high current. Electrolyte may react with incompatible materials if released.
10.2 Chemical stability	Stable when handled, charged, transported and stored according to instructions.
10.3 Hazardous reactions	Hydrogen may be formed during charging, especially during overcharge or abuse. Sulphuric acid may react with alkalis and some metals.
10.4 Conditions to avoid	Short-circuit, reverse polarity, overcharge, excessive charging voltage, unauthorised charging procedures, deep discharge, mechanical damage, puncturing, deformation, dismantling, fire, sparks, open flames, high temperature and direct sunlight.
10.5 Incompatible materials	Strong alkalis, oxidising agents, reducing agents, reactive metals and combustible/organic materials in case of acid leakage.
10.6 Hazardous decomposition products	Hydrogen during charging. In fire or thermal decomposition: sulphur oxides, lead oxides, acid mist, carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

This information does not apply to the intact article under normal conditions of use. It is relevant to internal components if the battery is damaged or leaking.

Acute toxicity	No acute toxicity is expected from intact batteries. Sulphuric acid exposure may cause severe local corrosive effects.
Skin corrosion/irritation	Leaking electrolyte causes severe skin burns.
Serious eye damage/irritation	Leaking electrolyte causes serious eye damage and may cause permanent injury.
Respiratory effects	Acid mist or fumes from damaged, overheated or burning batteries may irritate or damage the respiratory tract.
Sensitisation	No sensitisation expected from the intact article.
Mutagenicity/carcinogenicity	No exposure expected from intact batteries. Evaluate according to the substances released if damaged, burned or recycled.



SAFETY INFORMATION SHEET

SLI STARTER LEAD-ACID BATTERIES

Release date: 29/05/2026

Release nr.: 5 (corrected)

EU

Reproductive toxicity	Lead-containing components may damage fertility or the unborn child if exposure occurs. No exposure is expected during normal use of the finished article.
Other hazards	Do not rely on LD50/LC50 values for the finished battery article; such values are not meaningful for an intact article.

SECTION 12: Ecological information

12.1 Toxicity	The intact battery should not release substances to the environment. If damaged, lead-containing components and sulphuric acid may be harmful to aquatic and terrestrial environments.
12.2 Persistence/degradability	Lead is persistent. Sulphuric acid dissociates in water and may reduce pH.
12.3 Bioaccumulative potential	Lead and some lead compounds may accumulate in organisms and sediments.
12.4 Mobility in soil	Sulphuric acid is mobile in water. Lead mobility depends on pH and soil conditions.
12.5 PBT/vPvB assessment	Not applicable to the finished article.
12.6 Endocrine disrupting properties	No endocrine disrupting properties are identified for the intact article based on available information.
12.7 Other adverse effects	Avoid release to the environment. Collect and recycle spent batteries through authorised channels.

SECTION 13: Disposal considerations

Waste treatment	Do not dispose of batteries with household waste. Do not incinerate. Return spent batteries to an authorised collection, treatment or recycling system.
European waste catalogue	16 06 01* - lead batteries.
Recycling	Lead-acid batteries are recyclable. Keep spent and damaged batteries upright and protected against short-circuit and leakage during collection and transport.
Contaminated packaging/absorbents	Materials contaminated with electrolyte or lead-containing residues must be managed as hazardous waste according to local regulations.
Regulatory note	Disposal and producer responsibility obligations should be managed according to Regulation (EU) 2023/1542 and applicable national rules.



SAFETY INFORMATION SHEET

SLI STARTER LEAD-ACID BATTERIES

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EU

SECTION 14: Transport information

14.1 UN number	UN 2794
14.2 Proper shipping name	BATTERIES, WET, FILLED WITH ACID, electric storage
14.3 Transport hazard class	Class 8 - Corrosive substances
14.4 Packing group	Not assigned
14.5 Environmental hazards	Prevent release of electrolyte and lead-containing residues. Not classified as a marine pollutant for the intact article unless otherwise determined by the consignment assessment.
14.6 Special precautions	Protect terminals against short-circuit. Keep batteries upright and secure against movement. Do not ship damaged or leaking batteries as standard goods. Avoid acid residues on the outside of the battery. Keep away from incompatible goods in case of leakage.
14.7 Maritime transport in bulk	Not applicable.

Mode	Information
ADR/RID/ADN	UN 2794, BATTERIES, WET, FILLED WITH ACID, electric storage, Class 8. Applicable provisions include SP 295 and SP 598. Under SP 598, new and spent storage batteries may be exempt from ADR/RID when the stated conditions are met, including secure fastening, no damage/leakage, no acid traces on the outside, and protection against short-circuit.
IMDG Code	UN 2794, BATTERIES, WET, FILLED WITH ACID, electric storage, Class 8. EMS: F-A, S-B. Follow applicable packing, marking, labelling, stowage and segregation requirements.
ICAO-TI / IATA-DGR	UN 2794, BATTERIES, WET, FILLED WITH ACID, electric storage, Class 8. Follow applicable IATA Dangerous Goods Regulations, carrier requirements and packing instructions. Do not apply non-spillable battery exemptions unless the battery has been assessed to meet those criteria.
Alternative classification if non-spillable criteria are met	UN 2800, BATTERIES, WET, NON-SPILLABLE, electric storage, Class 8 may apply only when the specific battery meets the applicable non-spillable criteria and documentation/packaging requirements.

SECTION 15: Regulatory information

15.1 EU regulations	Regulation (EC) No 1907/2006 (REACH); Regulation (EC) No 1272/2008 (CLP); Regulation (EU) 2020/878 (SDS format, used here only as a practical structure where applicable); Regulation (EU) 2023/1542 concerning batteries and waste batteries.
REACH SVHC	Lead, CAS 7439-92-1, is listed as a substance of very high concern (SVHC) under REACH Article 57.
REACH Annex XVII	Restrictions for lead and lead compounds may apply depending on the use, product type and market. Assess relevant entries and national implementation before placing products on the market.
Battery obligations	Battery marking, producer responsibility, collection, treatment, recycling and information obligations must be managed according to Regulation (EU) 2023/1542 and applicable national requirements.
15.2 Chemical safety assessment	A chemical safety assessment has not been carried out for the finished article. Safety information is based on known hazards of contained components and foreseeable exposure scenarios.



SAFETY INFORMATION SHEET

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Release nr.: 5 (corrected)

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SECTION 16: Other information

Document basis	This information is based on current knowledge of SLI flooded lead-acid starter batteries and is intended to support safe handling, storage, transport, emergency response and disposal. It does not constitute a guarantee of specific product properties.
Relevant H statements	H314: Causes severe skin burns and eye damage. H360FD: May damage fertility. May damage the unborn child. H362: May cause harm to breast-fed children.
Main corrections vs previous version	Title changed from mandatory SDS wording to safety information sheet for an article; transport information kept as UN2794 for SLI wet batteries and clarified; erroneous "do not recharge" wording removed; first aid updated for acid exposure; fire section corrected; incompatible materials corrected; LD50/LC50 values for the finished article removed; Regulation (EU) 2023/1542 wording corrected.
Previous version	Previous release date: 18/05/2026. Previous release nr.: 4. Page 8 of the previous document also displayed 12/11/2024 and release nr. 2, which has been harmonised in this corrected version.
Abbreviations	ADR: Agreement concerning the International Carriage of Dangerous Goods by Road. CLP: Classification, Labelling and Packaging Regulation. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods Code. REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals. SDS: Safety Data Sheet. SLI: Starting, Lighting and Ignition. SVHC: Substance of Very High Concern.
Sources used for regulatory alignment	REACH and CLP regulations, ECHA information on chemicals, ADR provisions for UN2794/UN2800, IMDG Code and ICAO/IATA dangerous goods provisions for wet batteries, and Regulation (EU) 2023/1542 on batteries and waste batteries.