



PRODUCT INFORMATION SHEET

N° **BXKEFE02_**
DC_en

Mobility Power Solutions

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Title : **LEAD ACID AUTOMOTIVE BATTERIES - DRY CHARGED**

GENERAL REMARK

This leaflet was prepared in cooperation with the Committee of Environmental Affairs of EUROBAT (May 2003), reviewed by EUROBAT TC members (September 2003) and CEM (October – November 2003).
Last revision: October 2016.

Batteries are "articles" according to Regulation (EC) No 1907/2006 EC, they are not "substances" nor "mixtures", therefore there is no obligation to supply a safety data sheet (SDS) according to Regulation (EC) 1907/2006, and Regulation CLP (EC) 1272/2008.

Information on safe handling is provided as a service to our customers.

This product information sheet contains valuable information critical to the safe handling and proper use of the product. The details presented are in accordance with our present knowledge and experiences, they cannot advise all possible situation.

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name & Use: FIAMM Lead Acid Battery for automotive application

Company Identification FIAMM Energy Technology S.p.A.
Viale Europa, 75 I - 36075 Montecchio Maggiore (Vicenza)
Telephone +390444709311; Fax +390444699237

E-mail: sdp@fiamm.com

2. HAZARDS IDENTIFICATION

- No hazards because batteries are DRY and DO NOT contain electrolyte;
- No voltage at the terminals
- Only in a later stage to the delivery or sale, the battery must be "activated", that is filled with electrolyte and charged.

The correct handling and use of acid batteries do not pose a risk as long as precautionary measures are taken, are carried out in appropriate rooms and are carried out by personnel who have received adequate training.

The Batteries have to be marked with the symbols listed under item 15.

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3. COMPOSITION / INFORMATION ON INGREDIENTS

CAS no.	Index Numbers	Description	Content ¹⁾ [% of weight]	Hazards Category and Statement Code
7439-92-1	082-014-00-7	Lead Grid (massive lead, lead alloys)	~ 47	Repr. 1A - H360Df Lact- H362 STOT RE 1 – H372
7439-92-1	082-001-00-6	Active Mass (Lead dioxide, inorganic lead compounds, with possible traces of additives)	~ 47	Repr. 1A - H360Df Acute Tox. 4 - H332 Acute Tox. 4 - H302 STOT RE 1 - H372 Lact – H362 Carc.2 – H351 Aquatic Acute 1 - H400 Aquatic Chronic 1 H410
		Plastic Container / Plastic Parts ²⁾	~ 6	

¹⁾ Contents may vary due to performance data and/or application of the Battery
²⁾ Composition of the plastic may vary due to different customer requirements

Note:

Batteries do not contain Cadmium (Cd) nor Mercury (Hg)
 Lead metal (CAS 7439-92-1) and Lead monoxide (CAS 1317-36-8) are contained in the battery in quantity exceeding 0,1 % (w/w) and are classified as substances of very high concern under REACH

4. FIRST AID MEASURES

This information is of relevance only if the Battery is broken and this results in a direct contact with the ingredients.

4.1 General	Electrolyte (diluted sulphuric acid):	sulphuric acid acts corrosively and damages skin
	Lead compounds:	lead compounds are classified as toxic for reproduction (if swallowed)
4.2 Lead compounds	after skin contact:	clean with water and soap
	after inhalation:	inhale fresh air, seek advice of a medical doctor
	after contact with the eyes:	rinse under running water for several minutes, seek advice of a medical doctor
	after swallowing:	wash mouth with water, seek advice of a medical doctor

5. FIRE FIGHTING MEASURES

Suitable fire extinguishing agents:
 CO2 or dry powder extinguishing agents

Unsuitable fire extinguishing agents:
 Water, if the battery voltage is above 120 V

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Protective goggles, respiratory protective equipment, acid protective equipment, acidproof clothing in case of larger stationary battery plants or where larger quantities are stored.

6. ACCIDENTAL RELEASE MEASURES

This information is of relevance only if the battery is broken and the ingredients are released.

7. HANDLING AND STORAGE

Store under roof in cool ambiance

8. EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1 Lead and Lead compounds**

No exposure to lead and lead containing battery paste during normal conditions of use.

9. PHYSICAL AND CHEMICAL PROPERTIES

	Lead and Lead compounds	Electrolyte (diluted sulphuric acid solution)
Appearance		
form :	solid	liquid
colour :	grey	colourless
odour :	odourless	odourless
Safety related data		
solidification point :	327 °C	approx 35 to 60 °C
boiling point :	1740 °C	approx. 108 to 114 °C
solubility in water :	very low (0.15 mg/l)	complete
density (20°C) :	11.35 g/cm ³	1.2 to 1.35 kg/l
vapour pressure (20°C) :	N.A.	N.A.

Lead and Lead compounds used in Lead Acid batteries are poorly soluble in water, Lead can be dissolved in an acidic or alkaline environment only.

10. STABILITY AND REACTIVITY

- Stable and non reactive

11. TOXICOLOGICAL INFORMATION

This information does not apply to the finished product "lead acid battery". This information only applies to its compounds in case of a broken product. Different exposure limits exist on a national level.

11.1 Lead and Lead compounds

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Lead and its compounds used in a Lead Acid Battery may cause damage to the blood, nerves and kidneys when ingested. The lead contained in the active material is classified as toxic for reproduction.

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12. ECOLOGICAL INFORMATION

This information is of relevance if the battery is broken and the ingredients are released to the environment.

12.1 Lead and Lead compounds

Chemical and physical treatment is required for the elimination from water. Waste water containing lead must not be disposed of in an untreated condition.

Lead metal grids are not classified as eco-toxic.

13. DISPOSAL CONSIDERATIONS

Spent lead acid batteries (EWC 160601*) are subject to regulation of the EU Battery Directive and its adoptions into national legislation on the composition and end of life management of batteries.

Spent Lead Acid batteries are recycled in lead refineries (secondary lead smelters). The components of a spent Lead Acid battery are recycled or reprocessed.

To simplify the collection and recycling or reprocessing process, spent Lead Acid batteries must not be mixed with other batteries.

By no means may the electrolyte (diluted sulphuric acid) be emptied in an inexpert manner. This process is to be carried out by the processing companies only.

**200133 EWC may be used for municipal collected batteries.*

14. TRANSPORT INFORMATION

Land Transport (ADR/RID, U.S. DOT)

Not dangerous goods

Sea Transport (IMDG Code)

Not dangerous goods

Air Transport (IATA-DGR)

Not dangerous goods

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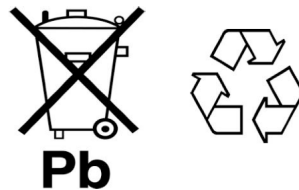
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Title : LEAD ACID AUTOMOTIVE BATTERIES - DRY CHARGED**15. REGULATORY INFORMATION**

The following legislation do not apply to lead-acid batteries:

- RoHS directive 2002/95/EC, updated by directive 2011/65/UE
- Low Voltage directive 73/23/EEC, updated by directive 2006/95/EC, if the voltage is < 75 V
- ELV directive 2000/53/EC
- EMC directive 89/336/EEC, updated by directive 2004/108/EC

In accordance with EU Battery Directive and the respective national legislation, Lead Acid batteries have to be marked by a crossed out dust bin with the chemical symbol for lead shown below, together with the ISO return/recycling symbol.



Labelling might vary due to application and dimension of the Battery. The manufacturer, respectively the importer of the batteries shall be responsible for placing the symbols (a minimum size is specified). In addition, consumer/user information on the significance of the symbols may be attached.



No smoking. Keep away from naked flames and/or sparks



Eye protection must be used



Keep away from children



Danger: corrosive acid



See instructions



Danger of explosion

16. OTHER INFORMATION

The information given above is provided in good faith based on existing knowledge and does not constitute an assurance of safety under all conditions. It is the user's responsibility to observe all laws and regulations applicable for storage, use, maintenance or disposal of the product. If there are any queries, the supplier should be consulted. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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