

Batteries are considered as articles under REACH regulation 1907/2006/EC and, as such, do not require the publication of a safety data sheet. However, there is a requirement to provide safety information on products. This document, which fulfils this requirement, is commonly called an SDS, but, in Europe, is more correctly referred to as 'Information for the Safe Handling of Lead-Acid Batteries'. This leaflet was prepared by the Committee of Environmental Affairs of EUROBAT (May 2003), reviewed by EUROBAT TC members (September 2003) and CEM (October – November 2003). Revision: June 2020.

EUROBAT CUSTOMER CARE PROGRAM

INFORMATION FOR THE SAFE HANDLING OF DRY CHARGED BATTERIES

1. Identification of Product and Company

Product: Motive Power Dry Charged battery

Trade name: Hawker Perfect Plus

Manufacturer: EH Europe GmbH

Address: Baarerstrasse 18, 6300 Zug, Switzerland

Phone: Emergency tel. no. +1 703 527 3887



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 section 15.

3. Composition and Information on the main Ingredients

CAS no.	Index Numbers	Description	Content ¹⁾ [% of weight]	Hazards Category and Statement Code, GHS pictograms
7439-92-1	082-014-00-7	Lead Grid (Lead massive, lead alloys)	~ 45	 Repr. 1A - H360FD 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)	~ 48	 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 ³⁾	~ 7	

- ¹⁾ Contents may vary due to performance data and/or application of the Battery
- ²⁾ Density of the electrolyte varies in accordance to the state of charge
- ³⁾ 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

Lead compounds: lead compounds are classified as toxic for reproduction

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, dry powder extinguishing agents or Water

Unsuitable fire extinguishing agents:

Water, if the battery voltage is above 120 V

Special protective equipment:

Protective goggles, respiratory protective equipment.

6. Measures to be taken in case of accidental release

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

7. Handling and Storage

Store under a roof in cool ambiance.

8. Exposure limits and personal protective equipment

8.1 Lead and Lead compounds

No exposure to lead and lead compounds during normal conditions of use.

9. Physical and Chemical properties

	Lead and Lead compounds
Appearance	
<i>form :</i>	solid
<i>colour :</i>	grey
<i>odour :</i>	odourless
Safety-related data	
<i>solidification point :</i>	327°C
<i>boiling point :</i>	1740°C
<i>solubility in water :</i>	very low (0.15 mg/l)
<i>density (20°C) :</i>	11.35g/cm ³
<i>vapour pressure (20°C) :</i>	N.A.

Lead and Lead compounds 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.

11.2 Lead and Lead compounds

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

12. Ecological Information

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

12.2 Lead and Lead compounds

Chemical and physical treatment is required for the elimination from water. Wastewater 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 re-processed.

At the points of sale, the manufacturers and importers of batteries, respectively the metal dealers take back spent batteries, and render them to the secondary lead smelters for processing.

To simplify the collection and recycling or re-processing procedure, spent Lead-Acid Batteries must not be mixed with other batteries.

*200133 EWC may be used for municipal collected batteries.

14. Transport Regulation

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

The transportation of dry charged batteries (those batteries that contain no electrolyte or residue) are not regulated by the ADR/U.S.DOT as a hazardous material.

Sea Transport (IMDG Code)

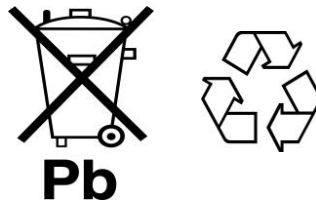
The international transportation of dry charged batteries is not regulated by the International Maritime Dangerous Goods code (IMDG) as a hazardous material.

Air Transport (IATA-DGR)

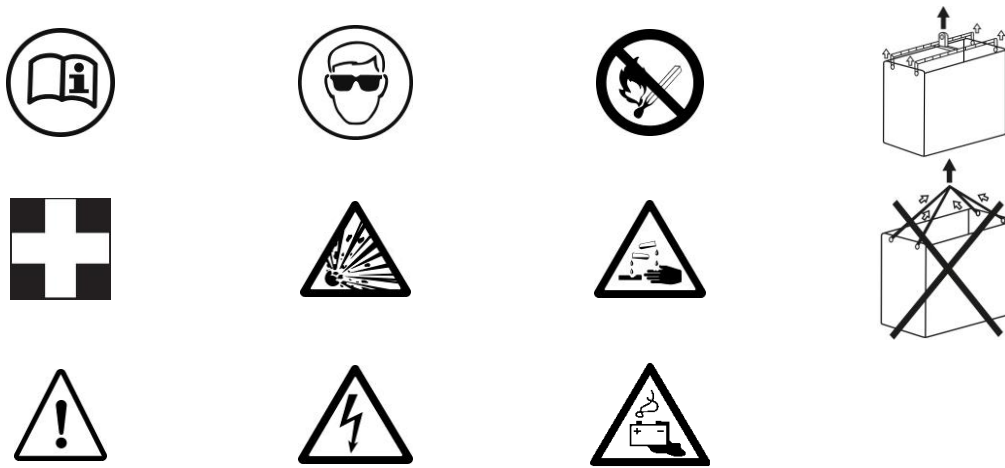
The international transportation of dry charged batteries is not regulated by the International Air Transport Association (IATA) as a hazardous material.

15. Regulatory Information

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.



In addition, Lead-Acid batteries may have to be labelled with the hazard symbols described below:



Labelling may 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.

Substances of Very High Concern (SVHC)

The publications of the European Chemicals Agency on substances of very high concern are monitored by EnerSys. As defined by REACH, customers will receive the required information if an updated publication may add a substance relevant for our products to the list of SVHC's. On 19 December 2012, four Lead compounds used in the process of battery manufacturing – **Lead Monoxide**, **Lead Tetroxide**, **Tetralead Trioxide Sulphate** and **Pentalead Tetraoxide Sulphate** – were added to the list of Substances of Very High Concern. As of June 27 2018, **Lead Metal** was added to the SVHC list as well.

Irrespective of the battery design (flooded, MHF, Gel, AGM) all lead based batteries contain Lead Metal (CAS Nr.: 7439-92-1). The content varies but exceeds the notification threshold of 0,1% w/w.

Dry Batteries/dry cells (dry charged plates, delivered without electrolyte) **contain more than 0,1 % of Lead Monoxide.** Lead Monoxide (CAS Nr.: 1317-36-8) is listed as a substance of very high concern. Once the batteries / cells are filled with electrolyte all Lead Monoxide is transformed and the presence of Lead Monoxide has ended.

16. Other Information

Products such as Batteries are not in the scope of regulation which require the publication of an EU Safety Data Sheet (Regulation (EC) 1907/2006, Article 31).

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.