MATERIAL SAFETY DATE SHEET

According the European directive 2001/58/CE **Date :8/21/2015**

Section 1. Chemical Product

MSDS Name: Valve Regulated Sealed Lead-Acid Batteries

Section 2. Composition /Information on Ingredients:

Chemical Nature: Lead, Lead Oxide, Lead Sulfate, Sulfuric Acid

CAS-No/EINECS NO.: List as below

Tariff No. 85072000

Dangerous ingredients which have to be mentioned according to 99/45/EEC and it adaptations

Chemical Name CAS No.	HAZARDOUS %by weight	TLV(UNITS)	RISK PHRASES
Lead **7439-92-1**	**50**	**N/A**	
Lead Oxide **1309-60-0**	**23**	**N/A**	
Lead Sulfate **7446-14-2**	**1**	**N/A**	
Sulfuric Acid **7664-93-9**	**8**	**1.25-1.35g/m^3**	

Section 3. Hazards identifications

General: Under normal operating conditions, the internal material will not be hazardous to your health. Only internally exposed material during production or case breakage or extreme heat (fire) may be hazardous to your health. The Common known rules for handing of chemicals should be obeyed. Do not eat/drink the product.

Section 4. First –aid measures:

Inhalation: In case of excessive inhalation remove the person to fresh air and at rest Obtain medical advice.

Skin Contact: Remove contaminated clothing. Wash affected areas with plentyof water and soap. If irritation occurs, consult a physician.

Eye contact: Rinse eyes immediately with running water for at least ten minutes. Consult an ophthalmologist.

Ingestion: Rinse mouth with water Give plenty of water to drink. Do not induce vomiting. Obtain medical advice.

Section 5. Fire-fighting measures

Suitable extinguishing media: Carbon dioxide (CO2), foam, dry chemical powder.

Extinguishing media not to be used: Never use a direct water jet.

Personal protective equipments: Wear full protective clothing. Use self-contained breathing

Section 6. Accidental release measures:

Personal precautions	ar protective clothing. Keep unprotected persons away.
Environmental precautions:	Avoid discharge and penetration into sewerage systems, waterways, pits, and cellars.
Methods for cleaning up:	Collect spilled material with an insert standard absorbent like sand or silica. Care for well-Ventilated conditions. Recycle or dispose of the materials in an appropriate way.

Section 7. Handling and storage

General	Obey the common known rules and precautions for handling with chemicals.
Storage:	Store product in well-filled, appropriate coated and tightly closed containers avoiding influence of oxygen/air, light and humidity .Store at a cool and constant temperature.

Section 8. Exposure controls/Personal protection

Exposition/ Technical measures Atmospheric vapor concentrations must be minimized by adequate ventilation.

Protection of hands, eyes and skin: To protect hands, eyes and skin, the use of appropriate chemical resistant glovers, safety glasses and suitable protective clothing is strictly recommended.

9. Physical and chemical propertied of Electrolyte

Physical state:	liquid	lubility in water:	soluble
Color:	clear	Vapor pressure:	no applicable
Odor:	acidic odor	Explosion limit:	not applicable
pH value:	not determined	Oxidizing properties:	not applicable
Specific gravity:	1.215-1.350 (at 25 °C)	Flashpoint:	none
Auto flammability:	not determined	Partition coefficient:	not determined
Melting Point:	lead 327.4°C	Boiling Point:	1515°C
Freezing Point:	not determined		

Section 10. Stability and Reactivity

Good stability at standard temperature.

Reactivity: Avoid contact with acids. Alkali or strong oxidizing agents.

Hazardous decomposition products: carbon monoxide and unidentified organic compounds my be formed during combustion.

Section 11. Toxicological information

The product is multi component mixture for which no toxicological date exists.

This preparation is classified XI, N R38-43.

Section 12. Ecological information

In general, no ecological date is available for preparations.

Precautions Avoid disposing into drainage systems and in the environment.

Section 13.Disposable considerations

Don not dispose of int environment or into sewerage. If recycling is not possible, the product and its container have to be disposed of in accordance with your local legislation and regulations.

Section 14. Transport Information

We hereby certify that the batteries conform to the UN2800 classification as "Batteries, wet, Non-Spillable, electric storage". We further certify that under (I.A.T.A.) Dangerous Goods Regulation, 41st edition, UN2800 provision A67 and the (D.O.T.), CFR 49 Section 173.159 paragraph d., the batteries having met the related conditions are EXEMPT from hazardous goods regulations, and therefore are unrestricted for Transportation by any means.

For you reference:

IATA Dangerous Goods Regulation, 44th Edition, Section 4.5A, Special Provision;

A67 Non-spillable batteries are considered to be non-dangerous if at a temperature of 55 deg. C(130 deg. F), the electrolyte will not flow from a ruptured or cracked case and there is no free liquid to flow and if, when packaged for transport, the terminals are protected from short circuit.

So it is General cargo, not DG cargo.

Section 15.Regulatory Information

Symbol: N/A

R/S-Phrases:

R38	Irritation to skin
R43	May cause sensitization by skin contact
S2	Keep out of reach of children
S24	Avoid contact with skin
S37	Wear suitable gloves
S61	Avoid release to environment. Refer to special instructions.

Section 16.Other information

The information on this Material Safety Date Sheet (MSDS) was obtained form current and reputable sources. However, the data is provided without any warranty; expressed or implied, regarding its correctness or accuracy. It is the user's responsibility to assume liability on loss, injury, damage, or expense resulting from improper use of this product. Any previous MSDS of this product mentioned above are hereby replaced with this new document. We urge you to make this information available as appropriate in your organization and to any others with whom you arrange to handle this product.

MSDS Preparaton Date: 8/21/2015