

# SHENZHEN LEOCH BATTERY TECHNOLOGY CO.,LTD

## MATERIALS SAFETY DATA SHEET

### PRODUCT: VALVE REGULATED LEAD-ACID BATTERY

#### Deleterious Materials:

Description of materials	Weight (%)	TLV	LD50 (In mouth)	LC50 Imbibe	LC50 (Touch)
lead (Pb)	>50~60%	—	—	—	—
PbO2	approx.10~12%	—	PbO2:200mg/Kg	—	—
PbSO4	approx.2~5%	—	PbSO4:290mg/Kg	—	—
acid	approx.10~15%	1mg/m3	2.14mg/Kg	—	—
fiberglass separator	approx.1~3%	—	—	—	—

#### Physics characters:

Description of materials	density(g/cc)	melting point(°C)	Solubility (Water)	odor	Appearance
Lead(Pb)	11.34	327.4	—	NON	silver gray metal
PbO2	2.4	290	—	NON	brown dust
PbSO4	6.2	1070	40mg/l	NON	white dust
ACID	1.32	114(b.p)	100%	Acidity	transparent Liquid
fiberglass separator	—	—	tiny dissolve	NON	white fiber glass

#### Flammability data:

Description of element	Burning point	Blow up	Remarks
lead (Pb)	—	—	
acid	—	—	
Hydrogen	—	4%-74.2%	if over-charge (the charging voltage exceed to 2.4/cell) battery will release Hydrogen
fiberglass separator	—	—	

First aid:

Attention for acid:

- 1.Skin——wash with water, if the burned area is large and have some reflect,please go to see the doctor soon;
- 2.Spatter to eyes——call the doctor immdeiatly,wash with water and waiting for the doctor;
- 3.Enter into the Ffauces——Push the doctor come immediately, if the patient in clear-headed situation, please gargle with milk or baking soda liquid;if the patient is unconsciousenss,please do not make any action to the patient.

## Related data:

items	acid
Stability	very stdady in every temperature
Aggregation	do not make any aggregation reaction
reactant which easy to reaction	metal,alkali and most of the organic compound
decompose production	sulfur dioxide, trioxid, hydrogen sulfide, hydrogen
forbid	please do not smoking during charging and avoid other acid mix in

## Treatment for acid leakage and spill:

If the electrolyte leak out from the battery,please counteract the acid in Baking Soda,Sodium carbonate or Calium oxide,then wash locale with water.Do not let the acid which have not been counteract go to the cloacae.

## Treatment for the waster materials:

The counteracted acid can be rank to cloaca,and the abandoned battery should be treated as Nocuousness goods and should be treated as related rule in lalac place,and the this kind of safty data should be provided to the waster station.

## Safeguard:

Explosion	Protect equipment	Attention
Skin	rubber glove、apron	If the battery was broken and need to disassemble the battery,please ware the protect equipment
breath	Respirator	
eyes	veil	

## Electric safety:

Becuse of the battery have low inner resistance、high energy debsuty, so the terminal can release lots of short circuit materials,please do not let the tool and cable touch the battery only use insulated tools and according to the instrucion when load and unload the battery.

## Healty harm data:

Lead: Lead is a kind of cumulate poisoning material,it will affect the kidney function and backbone system, the sign of lead poisoning is headache、stomach-ache、swirl and dazzle、no appetite、muscle and arthrosis attaint etc.

Acid: Acid is a strong causticity materials, it can burn the skin and eyes,both broken of the battery case and valve can be cause leakage of the acid.

Fiber glass separator: fiber glass is harm for people's breath, skin and eyes

## Packing and transportaion:

The leoch battery design accord with the "special rule" of <international dangerous goods transportation rule > (Unit nation No.2800) ,it can be free of inspection of dangerous goods packing, and can export as normal goods,so our battery can be shipped freely by Air,sea,and truck; they do not need any special package requirement except the battery terminal need to be protected with cover.