

MOTOBATT LIMITED (HONG KONG)

Material Safety Data Sheet:

Data Sheet No: Issue 1
Date Issued: February 10th,2014

Section 1 : Identification of the substance

product name: **Sealed lead Acid Battery**

Trade name:**Lead acid battery**

Company Name:MOTOBATT LIMITED (HONG KONG)

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Section 2 : Composition/Ingredient Data

Hazardous components Chemical Identity	CAS Number	OSHA PEL	ACGIH TLV	Percent By Weight	EC Number	Average
Lead	7439-92-1	50 ug/m ₃	50 ug/m ₃	45-55%	231-100-4	50%
Sulfuric Acid	7664-93-9	100ug/m ₃	1.00mg/m ₃	19-25%	231-639-5	22%
Lead Oxide	1309-60-0	50ug/m ₃	50ug/m ₃	19-23%	215-174-5	21%

	Risk Phases	Safety Phrases
Sulphuric Acid	R61,62,20/22,33	S1/2,S26,S30,S45
Lead Oxide	R35	None

Section 3: MOTOBATT Identification

Odour:Not applicable

Appearance:Article as described above

Weight High Density/Good lifting technique required

Refer to internal component .i.e. lead and sulphuric acid

Contact with eyes:Cause Irritation

Contact with skin:May cause dermatitis

Inhalation:May cause irritation

Ingestion:Can cause damage to the kidneys

Section 4: First Aid Measures

Contact with skin: Remove contaminated clothing immediately and drench affected skin with plenty of water, then wash with soap and water.

Contact with eyes: If substance has got into eyes, immediately wash out with plenty of water for at least 15 minutes.

Seek immediate medical attention.

Ingestion: Do not induce vomiting.

Seek immediate medical attention.

Inhalation: Remove patient to fresh air.
Seek medical attention if irritation persists.

Section 5 : Fire-Fighting Measures

Auto-ignition point (Hydrogen) 580°C at 760 mm Hg.

Wear positive-pressure breathing apparatus.

In case of fire use foam, carbon dioxide or dry agent(S43)

Flash point Hydrogen 259°C

Flammable Limits in air, Lower 4.1%

% by 3/4 vol.(Hydrogen)

Fire/explosion

Hydrogen and oxygen gases are produced in the cells during normal battery operation(hydrogen is flammable and oxygen supports combustion)

Section 6: Accidental Release Measures

Immediate Actions: Shut off all ignition sources.

Clean Up Actions: Neutralise with soda ash
Place in appropriate container
Ventilate area
Do not empty into drains(S29)

Section 7 : Handling and storage

Under normal conditions of battery use, internal components will not present a health hazard.

Handling: Keep away from heat and sources of ignition.
Wash hands thoroughly after use
Avoid sparks
Avoid contact with metal jewellery and watches etc.

Do Not Remove Vent Caps

Do not double stack industrial batteries, it may cause damage.

Storage: Keep in cool and dry & Protect from heat
Store lead acid batteries with adequate ventilation
Room ventilation is required for batteries utilised for standby power generation.
Never re-charge batteries in an unventilated ,enclosed space.

Section 8 : Exposure Controls/ Personal Protection

Personal protection: Wear safety shoes with toe protector.

Where internal components are liberated use rubber or neoprene boots.

Wear goggles/safety glasses giving complete eye protection.

Respiratory protection may be required under exceptional circumstances when excessive air contamination exists.

Wear PVC mitts,gloves or gauntlet.

Exposure Limits: Lead OES/LTEL-ppm 0.15 mg/m³
Lead Dioxide OES / LTEL-pmm 0.15 mg/m³

Section 9: Physical and Chemical Properties

Odour: Not applicable.
Appearance: Sealed Valve Regulated lead Acid Battery.
State under normal temp: Solid
Flash point (Hydrogen): 259°C

Internal components

pH-(Sulphuric acid): 1.3
Boiling point: Battery Electrolyte 110°C,Lead 1755°C
(at 760 mm/Hg)
Melting point: Lead 327.4°C
Vapour pressure: 11.7
Vapour density: Battery Electrolyte 3.4,(air=1)
Specific gravity: Battery Electrolyte 1.3g/cm³,(water=1)
Auto-ignition point: 580° deg C at 760 mm/Hg.
Water solubility: Battery Electrolyte is 100% soluble in water.

Section 10: Stability and Reactivity

VRLA Batteries are considered stable at normal conditions.
Keep away from heat and sources of ignition.
Incompatible with reducing agents,Incompatible with organic agents.
Decomposition products may include hydrogen.
Decomposition products may include sulphur oxides.

Section 11: Toxicological Information:

Danger of cumulative effects.(R33)
May cause severe irritation.
May cause gastro-intestinal disturbances.
Can cause damage to the mucous membranes.

Section 12: Ecological Information.

Ecotoxicology-no information available.

Section 13: Disposal Considerations

Classification: This material and / or its container must be disposed of as hazardous waste.

Disposal considerations: Do not discharge into drains or the environment ,dispose to an authorised waste collection point.

Section 14: Transport Information

We hereby certify that MOTOBATT LIMITED (HONG KONG).range of Maintenance Free Rechargeable Sealed Lead Acid batteries as "Batteries,Non-Spillable ,and electric storage" as a result of passing the Vibration and Pressure Differential Test described in DOT (49 CFR 173.159(d) and IATA / ICAO(Special Provision A 67) .

MOTOBATT having met the related conditions are EXEMPT from hazardous goods regulations for the purpose of transportation by DOT,and IATA / ICAO,and therefore are unrestricted for transportation by any means.

Section 15: Regulatory Information

Classification and labeling .Not classified as hazardous for supply.

Section 16: Other Information

Under normal conditions of battery use ,internal components will not present a health hazard,The information contained in the Safety Date Sheet is provideed for battery electrolyte(acid)and lead,for exposure that may occur during battery production or container breakage or under extreme heat conditions such as fire.

Tested as per IMDG Amdt 31-02,special provision 238"a"and "b",Comply.

This Safety Data Sheet and the information therein does not constitute the user's own assessment of work place risk as required by other Health & Safety legislation.