

MOTOBATT LIMITED**Material Safety Data Sheet:**

Data Sheet No: V2
Date Issued: Nov. 10th, 2022

Section 1 : Identification of the substance

product name: **Sealed lead Acid Battery**
Trade name: **Lead acid battery**
Manufacturers Name: **MOTOBATT LIMITED**
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Section 2 : Composition/Ingredient Data

Hazardous components Chemical Identiv	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%
Lead Oxide	1309-60-0	50ug/m ₃	50ug/m ₃	19-23%	215-174-5	41%

	Risk Phases	Safety Phrases
Lead Oxide	R35	None

Section 3: MOTOBATT Identification

Odour: Not applicable
Appearance: Article as described above
Weight High Density/Good lifting technique required

MINTONG 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.

Sealed Lead-Acid Batteries

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

Note: Transportation requirements do not apply once the battery pack has been installed in a vehicle as part of the vehicle's functional components

Transportation: Sealed Lead Acid / MOTOBATT Battery is not a DOT Hazardous Material

Other: Per DOT, IATA, ICAO, and IMDG rules and regulations, these batteries are exempt from "UN2800" classification as a result of successful completion of the following tests:

1.) Vibration tests

2.) Pressure Differential Tests

3.) Case Rupturing Tests (no free liquids)

GROUND – US-DOT/CAN-TDG/EU-ADR/APEC-ADR:

Not regulated as dangerous goods per 49 CFR 173.159a

AIRCRAFT – ICAO-IATA:

Not regulated as dangerous goods per Special Provision A67

VESSEL – IMO-IMDG:

Not regulated as dangerous goods per exception 238

Section 15: Identification conclusion

1, No obvious hazard. This battery has met the test requirements of vibration test, Pressure differential test, Non-spillable test (MDIO6C6N75909521).

2, The goods are not subject to IMDG.

3, The goods are packaged according to the packaging requirement of Non-restricted Goods. When packaged for transport, the terminals must be protected from short circuit and accidental start-up.

Section 16: Regulatory Information

Classification and labeling .Not classified as hazardous for supply.

Section 17: Other Information

Under normal conditions of battery use , internal components will not present a health hazard, The information contained in the Safety Data Sheet is provided 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.