

Material Safety Data Sheet (MSDS)

According to (EC) No.1907/2006 and amendment (EU) 2015/830

Report No.: DGC190116030NE02

Date: Jan. 22, 2019

Page 1 of 9

Product Name: Lead-Acid Battery

MSDS

According to

(EC) No.1907/2006 and amendment (EU) 2015/830

Applicant: Neata Battery Manufacture Co., Ltd.
Address: West Zone Industrial park, Xiaolan, Zhongshan, Guangdong, China

Product Name: Lead-Acid Battery

Issue date: Jan. 22, 2019

Edited by: NTEK Testing Technology Co., Ltd.

Written by:

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Page 2 of 9

Product Name: Lead-Acid Battery

Section 1 - Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name: Lead-Acid Battery

Model: 12V7, 2V4Ah, 2V4.5Ah, 2V5Ah, 2V6Ah, 4V3.0Ah, 4V3.2Ah, 4V3.5Ah, 4V4Ah, 4V4.5Ah, 4V5.0Ah,

4V5.5Ah, 4V6.0Ah, 4V6.5Ah, 4V7.0Ah, 4V7.5Ah, 4V8.0Ah, 4V8.5Ah, 4V9.0Ah, 4V10Ah, 4V12Ah, 6V1.0Ah, 6V1.2Ah, 6V1.3Ah, 6V1.5Ah, 6V2.0Ah, 6V2.5Ah, 6V2.3Ah, 6V2.8Ah, 6V3.0Ah, 6V3.2Ah, 6V3.3Ah, 6V3.5Ah; NT6-4(3), 6V4Ah, 6V4.5Ah, NT6-4.5(4), 6V5.0Ah, 6V5.2Ah, 6V5.5Ah, 6V6.0Ah, 6V6.5Ah, 6V6.8Ah, 6V7.0Ah, NT6-7(5), 6V7.2Ah, 6V7.5Ah, 6V8.0Ah, 6V8.5Ah, 6V9.0Ah, 6V10Ah, 6V12Ah, 6V14Ah, 6V15Ah, 6V7.0Ah, 6V7.2Ah, 6V7.5Ah, 6V8.0Ah, 6V8.5Ah, 6V9.0Ah, 6V10Ah, 6V12Ah, 6V14Ah, 6V15Ah, 6V20Ah, 6V40Ah, 6V50Ah, 6V100Ah, 6V120Ah, 6V150Ah, 6V180Ah, 6V200Ah, 6V220Ah, 6V250Ah, 12V0.8Ah, 12V1.0Ah, 12V1.2Ah, 12V1.3h, 12V1.5Ah, 12V2.0Ah, 12V2.3Ah, 12V2.6Ah, 12V2.8Ah, 12V3Ah, 12V3.2Ah, 12V3.3Ah, 12V3.5h, 12V4.0Ah, 12V4.5Ah, 12V5Ah, 12V5.2Ah, 12V5.5Ah, 12V6.0Ah, 12V6.5Ah, 12V7.0Ah, NT12-7(5.5), 12V7.2h, 12V7.5Ah, 12V8.0Ah, 12V8.5Ah, 12V9.0Ah, 12V10Ah, 12V12Ah, 12V13Ah, 12V14Ah, 12V15h, 12V17Ah, 12V18Ah, 12V20Ah, 12V22Ah, 12V24Ah, 12V26Ah, 12V28Ah, 12V30Ah, 12V33h, 12V35Ah, 12V38Ah, 12V40Ah, 12V42Ah, 12V45Ah, 12V50Ah, 12V55Ah, 12V60Ah, 12V65h, 12V70Ah, 12V75Ah, 12V80Ah, 12V85Ah, 12V90Ah, 12V95Ah, 12V100Ah, 12V110Ah, 12V120h, 12V130Ah, NT12-134, 12V145Ah, 12V150Ah, 12V160Ah, 12V170Ah, 12V180Ah, 12V200Ah, 12V220Ah, 12V250h, 12V260Ah, 2V50Ah, 2V100Ah, 2V150Ah, 2V200Ah, 2V250Ah, 2V300Ah, 2V350Ah, 2V400Ah, 2V450Ah, 2V500Ah, 2V600Ah, 2V650Ah, 2V800Ah, 2V900Ah, 2V1000Ah, 2V1500Ah, 2V1800Ah, 2V2000Ah, 2V2500Ah, 2V3000Ah, NT2-200, NT2-300, NT2-400, NT2-500, NT2-600, NT2-800, NTF12-55, NTF12-75, NTF12-100, NTF12-105, NTF12-120, NTF12-150, NTF12-180, NTF12-200.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: No information available.

Uses advised against: No information available.

1.3 Details of the supplier of the Material safety data sheet

Supplier: Neata Battery Manufacture Co., Ltd.

Address: West Zone Industrial park, Xiaolan, Zhongshan, Guangdong, China

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Page 3 of 9

Product Name: Lead-Acid Battery

1.4 Emergency telephone number: /

Section 2 - Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

The product is not classified according to the CLP regulation.

Classification according to Directive 67/548/EEC [DSD] or Directive 1999/45/EC [DPD]

The product is not classified according to the DSD and DPD directive.

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 [CLP]

The product is not classified and labelled according to the CLP regulation.

Hazard pictogram(s): N/A

Signal word: N/A

Hazard statement(s): N/A

Precautionary statements: N/A

2.3 Other hazards:

No hazards occur during the normal operation of a Lead Acid Battery as it is described in the instructions for use that are provided with the Battery. Lead Acid Batteries have three significant characteristics:

1. They contain an electrolyte which contains diluted sulphuric acid. Sulphuric acid may cause severe chemical burns.
2. During the charging process or during operation, they might develop hydrogen gas and oxygen, which under certain circumstances may result in an explosive mixture.
3. They can contain a considerable amount of energy, which may be a source of high electrical current and a severe electrical shock in the event of a short circuit.

The Batteries have to be marked with the symbols listed under section 15.

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Date: Jan. 22, 2019

Page 4 of 9

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Section 3 – Composition/Information on Ingredient

3.1 Chemical characterization: Mixtures

Description:

Product: consisting of the following components.

Chemical Name	CAS No.	EC No.	Concentration
Positive plate (PbO ₂)	1309-90-0	215-174-5	35%
Positive plate (Pb)	7439-92-1	231-100-4	35%
ABS	9003-56-9	618-371-8	5%
Dilute sulphuric acid (H ₂ SO ₄)	7664-93-9	231-639-5	20%
Glass Fiber (AGM)	65997-17-3	920-837-3	4.5%
Terminal, glue, etc.	—	—	0.5%

Section 4 - First Aid Measures

4.1 Description of first aid measures

General information:

In all cases of doubt, seek medical attention.

Following inhalation:

Generally, harmless. If feel unwell, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Following skin contact:

If electrolyte leakage occurs and makes contact with skin, immediately remove contaminated clothing, scrub with a dry cloth first, then wash with plenty of water, wash with 3%-5% NaHCO₃ solution finally. Get medical aid.

Following eye contact:

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Following ingestion:

Call a POISON Center or doctor/physician if you feel unwell. Rinse mouth.

Information for doctor:

No information available.

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Report No.: DGC190116030NE02

Date: Jan. 22, 2019

Page 5 of 9

Product Name: Lead-Acid Battery

4.2 Most important symptoms and effects, both acute and delayed

No information available.

4.3 Indication of any immediate medical attention and special treatment needed

No information available.

Section 5 – Firefighting measures

Fire disaster/Explosion risk: Generally, security, no fire and no explosion. While, severe impact and high fever may cause explode.

Extinguishing agent: Carbon dioxide, dry chemical or foam extinguishers.

Fire extinguishing methods: 1. Fire personnel are required to wear self-contained breathing apparatus to avoid breathing irritant fumes. Wear protective clothing and equipment to prevent body contact with electrolyte solution. 2. Rapid evacuation of emergency personnel to leave the fire, quickly cut off the fire source. 3. To mist cooling the tanks or containers exposed to fire. 4. If the spill has not ignited, water spray mist to spread the steam and to protect personnel attempting to stop the leak. 5. Large area of the large fire, use water spray control of unmanned aircraft operated or automatic swinging fire hose.

Fire-fight notes : 1. Move containers as far as possible from the fire scene to department. 2. In imposing the upper hand to avoid the risk of steam and toxic decomposition products. 3. Tank safety valve has been sounded, or discoloration due to fire and immediately evacuated.

Section 6 - Accidental Release Measures

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

Clean-up methods: 1. Isolate leakage pollution area, access restricted. 2. Recommend emergency personnel to wear self positive pressure respirator and acid-base proofing overalls. 3. Do not contact with the leakage directly, if the chemical substances leaked outside of battery, try neutralizing exposed battery parts with soda ash or sodium bicarbonate until fizzing stops, and using sand or bonding agent to absorb split acid. 4. Collect residue in a suitable container and place the broken battery in a heavy-duty plastic bag or other non-metallic container.

Note: 1. Leakage region ventilation. 2. Fight or remove all ignition sources. 3. To prevent leakage of material into the sewer or confined space. 4. Notify the government health and safety and environmental protection-related units.

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Page 6 of 9

Product Name: Lead-Acid Battery

Section 7 - Handling and Storage

Handling Precautions: 1. With closed operation, provide a good natural ventilation. The operator must go through specialized training, strict compliance with operating rules. 2. Keep away from heat, ignition sources and no smoking. Use non-sparking ventilation explosion-proof type equipment. 3. Do not crush, short (+) and (-) battery terminals with conductive (i.e. metal) goods. 4. Do not directly heat or solder. Do not throw into fire or the place where may be submerged by water. 5. Do not be installed in sealed equipment. 6. Make sure than the connection between batteries is correct. 7. Do not use the battery in places where are full of dust (it should be regular checked when used in dusty environment). 8. Use tools which are with insulating bush when handling. 9. Do not clean the battery with diluent, gasoline, kerosene or composite liquid. 10. Slow handling when disassembly. 11. Do not cover the battery with materials which can produce static electricity. 12. Battery do not be thrown away, put in as much as possible separated from other garbage. 13. Pay special attention to be not smash foot.

Storage Precautions: 1. Stored in a cool, dry, well-ventilated place, keep batteries in non-conductive (i.e. plastic) trays. Storage areas should be clearly marked "no obstacles." 2. Away from combustibles areas. Away from heat, ignition sources. Avoid overheating and supercooling. Avoid contacting with metal containers directly, adopt acid proofing and flame resistant materials. 3. Near the storage areas have adequate fire extinguishers and spill clean-up equipment. 4. Avoid storing large quantities of indoor, as much as possible stored in the isolation of the fire building. 5. Small parts, avoid contact with children, to avoid being swallowed children.

Section 8 - Exposure controls/personal protection

Exposure controls

Appropriate engineering controls: Provide local exhaust or process enclosure ventilation system.

Respiratory protection: In case of inadequate ventilation wear respiratory protection.

Skin protection: Wear protective gloves.

Eye and face protection: Wear protective eye/face protection.

Body protection: Wear protective clothing to prevent contact.

Environmental exposure controls: Avoid release to the environment. Avoid discharge into drains, surface water or groundwater.

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Page 7 of 9

Product Name: Lead-Acid Battery

Other protection: In the workplace non-smoking or eating. After work, take a bath. Separate storage of contaminated clothing, washed standby. Attention to personal hygiene.

Section 9 - Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance:	/
Colour:	/
Odour:	/
Flammability (solid, gaseous):	Product is flammable.
Self-igniting:	/
Danger of explosion:	Product present an explosion hazard.
Solubility:	PbO ₂ : Insoluble in water and alcohol, soluble in acetic acid and sodium hydroxide, decomposed by heating, Pb: Insoluble in water

Other information:

9.2 Additional information: No data available.

Section 10 - Stability and Reactivity

Stability: Stable under normal use, hazardous reactions occurring under specific conditions, such as overheating and overcharging.

Avoid material: Conductive materials, water, seawater, strong oxidizers, strong acids, strong alkaline materials, organic solvents

Avoid contact with conditions: When a battery cell is exposed to an external short-circuit, crushes, modification, high temperature above 100 °C, it will be the cause of heat generation and ignition. Direct sunlight and high humidity.

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Page 8 of 9

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Hazardous decomposition products: Once batteries are breakage, split sulphuric acid should be careful which is corrosive, nonflammable liquid (thermal decomposition at 338°C) and destroys organic materials such as cardboard, wood, textiles and reacts with metals, producing hydrogen. Acid or harmful gas is emitted during fire.

Section 11 - Toxicological Information

Acute toxicity: No information available.

Skin corrosion/irritation: May cause corrosion/irritation.

Serious eye damage/irritation: May cause irritation.

Respiratory or skin sensitization: No sensitizing effects known.

Toxicokinetics, metabolism and distribution: No information available.

CMR effects (carcinogenity, mutagenicity and toxicity for reproduction): No information available.

Section 12 - Ecological Information

This information is of relevance if the battery is broken and the ingredients are released to environment. In order to avoid damage to the sewage system, the acid has to be neutralized by means of time or sodium carbonate before disposal. Ecological damage is possible by change of pH. The electrolyte solution reacts with water and organic substances, causing damage to flora and fauna. The electrolyte may also contain soluble components of lead that can be toxic to aquatic environments. Leaking metals will easily penetrate the soil, polluting groundwater, and then into the fish life, crops, the destruction of the human living environment, an indirect threat to human health. More importantly, the contaminated soil will be permanently lose its use value.

The waste batteries contain heavy metals can not be biodegradable and can accumulate in vivo.

Section 13 - Disposal Considerations

The nature of waste: Hazardous waste

Waste disposal methods: Dispose of batteries according to government regulations. Recommend sent to a special recycling bins of used batteries.

Notes waste: Do not waste batteries and garbage mixed together, to be dealt with separately.

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Page 9 of 9

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Section 14 - Transport Information

In the case of transportation, confirm no leakage and no overspill form a container. Take in a cargo of them without falling, dropping and breakage. Prevent collapse of cargo piles and wet by rain. The container must be handle carefully. Do not give shocks that result in a mark of hitting on a cell. In accordance with the above considerations when loading the batteries.

Section 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.

Section 16 - Additional Information

Reference: N/A

The data in this Material Safety Data Sheet relates only to the specific material designated herein.



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