LEAD ACID BATTERY

Material Safety Data Sheet



Date Issued: May 12, 2020

1.Identification of the Substance

Product name: LEAD ACID BATTERY

Model list: RND 305-00076, RND 305-00077, RND 305-00078, RND 305-00079, RND 305-00080, RND 305-00081, RND 305-00085, RND 305-00086, RND 305-00087, RND 305-00090

Manufacturers Name: RND POWER

Manufacturers Address: c/o TeCo CDC BV, De Tweeling 28, NL-5215 MC's- Hertogerbosch The Netherlands E-mail: rnd@distrelec.com Tel: +41 44 944 99 11 , +41 44 944 99 88

2. Hazards Identification

- Odour : Not applicable
- Appearance: Article as described above
- Weight High Density/Good lifting technique required
- RND refer to internal component, i.e. lead and sulphuric acid
- Contact with eyes: Causes irritation
- Contact with skin: May cause dermatitis
- Inhalation: May cause irritation
- Ingestion: Can cause damage to the kidneys

3. Composition / Ingredient Data

Ingredient	CAS No.	Concentration (%)
Pb	7439-92-1	70
Sulfuric Acid	7664-93-9	20
Fiberglass Separator	65997-17-3	5
ABS	25155-30-0	5

SVHC: Lead, Sulfuric Acid, Fiberglass Separator, ABS.

4. First Aid Measures

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

5. Fire-Fighting Measures

- Auto-ignition point (Hydrogen) 580 $^\circ\!\!\mathbb{C}$ at 760 mm HG
- Wear positive-pressure breathing apparatus
- In case of fire use foam, carbon dioxide or dry agent (S43)
- Flammable Limits In air, lower 4.1%.
- % by 3/4 vol. (Hydrogen)
- Hydrogen and oxygen gasses are produced in the cells during normal battery operation (Hydrogen is flammable and oxygen supports combustion)

6. Accidental Release Measures

Immediate Actions: Shut off all ignition sources Clean Up Actions: • Neutralise with soda ash

- Neutralise with soda ash
 - Place in appropriate container
 - Ventilate area
 - Do not empty into drains (S29)

LEAD ACID BATTERY

Material Safety Data Sheet



7. Handing 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 jewelry and watches etc.
 - Do not remove vent caps
 - Do not double stack industrial batteries, it maybe cause damage
- Storage

Keep in cool and dry & Protect from heat

- Store lead acid batteries with adequate ventilation
- Room ventilation is required for batteries utilized for standby power generation
- Never re-charge batteries in an unventilated enclosed space

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 gauntlets
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- 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 $^\circ\!\mathrm{C}$, Lead 1755 $^\circ\!\mathrm{C}$ (at 760 mm/Hg)
- Melting point: Lead 327.4 $^\circ\!\mathrm{C}$
- Vapour pressure: 11.7
- Vapour density: Battery Electrolyte 3.4, (air = 1)
- Specific gravity: Battery Electrolyte 1.3 g/cm3. (water = 1)
- Auto-ignition point: 580° Cat 760 mm/Hg.
- Water solubility: Battery Electrolyte is 100% soluble in water

10. Stability and Reactivity

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

11. Toxicological Information

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

LEAD ACID BATTERY

Material Safety Data Sheet



12. Ecological Information

Eco toxicology - no information available

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 authorized waste collection points.

14. Regulatory Information

Classification and labeling, Not classified as hazardous for supply

15. Other information

Under normal conditions of battery use, internal components will not present a health hazard. The information contained in this 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 there in does not constitute the user's own assessment of work place risk as required by other Health & Safety Legislation