

# MATERIAL SAFETY DATA SHEET

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[APC Lead Acid Replacement Battery: APCRBC117J-NM]

## 1. Product name / Company identification

Schneider Electric Japan, Inc..  
QA Compliance  
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Minato-ku, Tokyo 105-0011, Japan  
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**Product Name:** Small Valve Regulated Lead Acid Battery

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## 2. Composition / Information on Ingredients

| Parts Name      | Name                        | Chemical Name                  | CAS No.   | Approx % by wt. |
|-----------------|-----------------------------|--------------------------------|-----------|-----------------|
| Plate           | Lead                        | Pb                             | 7439-92-1 | 60~75%          |
|                 | Lead Dioxide                | PbO <sub>2</sub>               | 1309-60-0 |                 |
|                 | Lead Sulfate                | PbSO <sub>4</sub>              | 7446-14-2 |                 |
| Electrolyte     | Sulfuric Acid               | H <sub>2</sub> SO <sub>4</sub> | 7664-93-9 | 12~25%          |
| Case, Top cover | ABS resin                   | —                              | —         | 10~15%          |
|                 | Brominated flame retardants | —                              | —         |                 |
|                 | Antimony Trioxide           | Sb <sub>2</sub> O <sub>3</sub> | 1309-64-4 |                 |

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## 3. Hazards identification

Name of classification:

Not Applicable

Dangerous:

Hydrogen and Oxygen gasses may generate from the battery. Therefore battery may catch fire or explode if the spark is near the battery.

Hazard:

In case electrolyte contacts with skin or eye, sulfuric acid may cause a severe chemical injury or may cause loss of sight.

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#### **4. First aid measures**

In case of contact with eye:

Even small quantity, it must continuously wash with large quantities of water.

Call a physician as quickly as possible.

In case of contact with skin:

Immediately wash with large quantities of water.

If it is in danger of chemical injury, call a physician as quickly as possible.

In case of drinking:

Wash mouth with large quantities of water and drink large quantities of fresh water.

And call a physician as soon as possible.

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#### **5. Fire fighting measures**

Use a powder, foam or nonflammable-gas extinguisher to fight a fire.

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#### **6. Accidental release measures**

Wash out electrolyte (SULFURIC ACID) with large quantities of water acid after neutralizing sulfuric acid with soda ash. (Use a safety glasses, gloves and boots.)

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#### **7. Handling and storage**

Handling care:

Don't bring the battery close a fire.

Don't short-circuit at terminals.

Charge the battery at open place.

Storage care:

Don't storage the battery in following places. The places, which receive high temperature, high humidity, raindrops, direct sunshine. The places which injurious gas, liquid drops, powder may generate. The places, which under water.

## 8. Exposure controls / Personal protection

Not Applicable.

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## 9. Physical and chemical properties

Not Applicable

Ingredients Reference data:

| Component         | SULFURIC ACID<br>Reference: Gravity is 1.30 | LEAD                  | LEAD DIOXIDE        |
|-------------------|---|-----------------------|---------------------|
| Visual            | Liquid<br>Transparent and Colorless         | Solid<br>Silver white | Solid<br>Dark Brown |
| Specific gravity  | 1.30  | 11.3                  | 9.4                 |
| Boiling point     | 110°C                                       | -                     | -                   |
| Melting point     | <=-40°C                                     | 327°C                 | 290°C               |
| coagulation point | -56.4°C                                     | -                     | -                   |
| Vapor pressure    | 3.17 kPa                                    | -                     | -                   |

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## 10. Dangerous information (Stability and reactivity)

Upon heating, the steam is generated. Continuing heating, the sulfuric acid vapor is generated. Reacting with element with high ionization tendency such as iron, etc., hydrogen gas is generated.

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## 11. Toxicological information

Corresponding to hazards identification.

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## 12. Ecological information

Corresponding to hazards identification.

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## 13. Disposal considerations

Battery must be recycled. When disposing used batteries, they are corresponding to industrial disposing items. You have to dispose the batteries according to the industrial disposing law in Japan or each country. When disposing used batteries, please cover their terminals with plastic tape as a way of insulation in order to be protected against short circuit. Otherwise, explosion or fire can be caused by short circuit as used batteries still has some energy.

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## 14. Transport information

### Caution on transportation

- (1) Keep the battery normal position during transportation. Don't give abnormal vibration to the battery.
- (2) Don't carry the battery with terminal or wire.
- (3) Don't fall down the battery to avoid the leakage of electrolyte from the battery.

(4) Take a caution of falling during moving the battery because the battery is heavy.

#### **Applicable law for transportation**

##### **【 Domestic (Japan ) 】**

Small valve regulated batteries are not applicable in Japan.

##### **【 Oversea 】**

Identification and Proper Shipping Name

Batteries – Wet, Non-Spillable, Electric Storage, UN2800

“NONSPILLABLE” or “NONSPILLABLE BATTERY” marking must be labeled on outer package.

Transport by sea: Unregulated, Special Provision 238 of dangerous goods of IMO applicable.

Transport by air: Unregulated, Special Provision A67 of dangerous goods of IATA/ICAO applicable.

Land transportation in U.S.A and Canada.: Unregulated, law 49 CFR 173, 159 (a) by Department of Transportation (DOT).

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### **15. Regulatory information**

Federal Regulatory Information

TSCA: Ingredients in our small valve regulated lead acid batteries are listed in the TSCA registry as follows;

Lead, Lead Dioxide, Lead Sulfate, Sulfuric Acid, Calcium, Tin, Barium and Antimony Trioxide.

California Prop 65

Battery posts, terminals and related accessories contain lead and lead compounds, and other chemicals known to the state of California to cause cancer and birth defects or other reproductive harm. Wash hands after handling.

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### **16. Other information**

None