

**SECTION 1: IDENTIFICATION**

**1.1 Product identifier**

|                       |  |
|-----------------------|--|
| <b>Product name:</b>  | Battery pack containing sealed lead acid batteries in an uninterruptible power supply  |
| <b>Other names:</b>   | Battery pack or accumulator pack with Valve Regulated Lead Acid Battery- Wet, Non-Spillable  |
| <b>Model Numbers:</b> | APC-RBCXXX(L)(-AAA) or SYBT(U)XXX(-AAA) (where XXX is 1 through 999 and APC, L, U, -AAA are optional and AAA is a two or three letter customer or country code) or YYYY(XXX)BP (where YYYY are a series of letters designating UPS product family (like SU, SUA, SCR, SRT, UX, UXA) and XXX is pack voltage (like 24, 48, 192) |
| <b>Country</b>        | USA/Canada   |
| <b>Product type:</b>  | Battery pack is a manufactured article consisting of a plastic and metal sealed case containing one or more sealed lead acid battery connected by wires. Solid.  |

|   |   |
|---|---|
| <p>Examples of products covered by this safety data sheet</p> <ol style="list-style-type: none"> <li>1. RBC2</li> <li>2. RBC12</li> <li>3. APCRBC123</li> <li>4. APCRBC152</li> <li>5. APCRBC140</li> <li>6. SYBT2</li> </ol> |  |
|---|---|

**1.2 Relevant identified uses of the substances or mixture and uses advised against**

Relevant identified use(s): Electric Storage Battery

**1.3 Details of the supplier of the safety data sheet**

|                               |  |
|-------------------------------|--|
| <b>Supplier/Manufacturer:</b> | Schneider Electric IT USA, Schneider Electric IT Corp., (formerly APC by Schneider Electric, APC Sales and Service Corp.)                      |
| <b>Address:</b>               | SEIT US - Fairgrounds Road West Kingston, RI 02892, US<br>SEIT Canada - c/o 210080, PO Box 11728, SUCC. Centre-Ville, Montreal, QC, H3C 6P7132 |
| <b>Telephone:</b>             | +1 800-788-2208 or +1 401-789-5735   |
| <b>E-mail:</b>                | <a href="http://nam-en.apc.com/app/ask">http://nam-en.apc.com/app/ask</a>  |
| <b>Site web:</b>              | www.APC.com  |
| <b>Telecopy:</b>              | Not available.   |

**1.4 Emergency telephone number (24-hour)**

+1 800-788-2208

## SECTION 2: HAZARDS IDENTIFICATION

### OSHA Status/HSC

While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for available for employees and other users of this product.

### 2.1 Classification of the substance or mixture

**According to CLP No 1272/2008:**

Acute Toxicity Oral 4 – H302

Skin Corrosion 1A – H314

Reproductive Toxicity 1A – H360Df

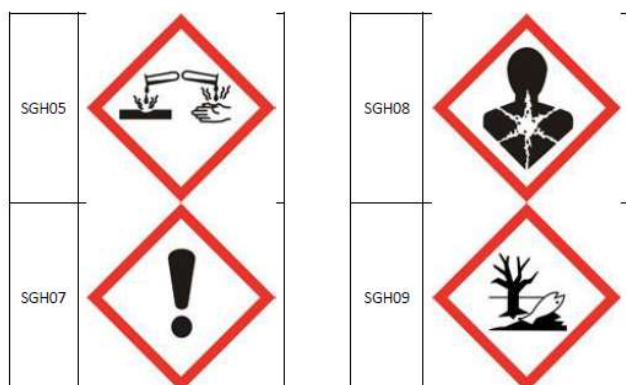
Specific Target Organ Toxicity Repeated Exposure 2 – H373

Hazardous to the aquatic environment Acute 1 – H400

Hazardous to the aquatic environment Chronic 1 – H410

### 2.2 Label elements

Signal Word: DANGER



### Hazard Statements

|        |  |
|--------|--|
| H302   | Harmful if swallowed.  |
| H314   | Causes severe skin burns and eye damage.                           |
| H360Df | May damage the unborn child. Suspected of damaging fertility.      |
| H373   | May cause damage to organs through prolonged or repeated exposure. |
| H400   | Very toxic to aquatic life.  |
| H410   | Very toxic to aquatic life with long lasting effects.              |

### Precautionary statements

|                    |  |
|--------------------|--|
| P201               | Obtain special instructions before use.  |
| P202               | Do not handle until all safety precautions have been read and understood.  |
| P260               | Do not breathe mist/vapours/spray.   |
| P264               | Wash thoroughly after handling.  |
| P270               | Do not eat, drink or smoke when using this product.  |
| P280               | Wear protective gloves/protective clothing/eye protection/face protection.   |
| P281               | Use personal protective equipment as required.   |
| P273               | Avoid release to the environment.  |
| P304 + P340        | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.                                 |
| P303 + P361 + P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.                              |
| P310               | Immediately call a POISON CENTER or doctor/physician.  |
| P321               | Specific treatment, see supplemental first aid information.  |
| P363               | Wash contaminated clothing before reuse.   |
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P301 + P312        | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician if you feel unwell.   |
| P330               | Rinse mouth.   |
| P331               | Do NOT induce vomiting.  |
| P314               | Get medical advice/attention if you feel unwell.   |
| P308 + P313        | IF exposed or concerned: Get medical advice/attention.   |
| P391               | Collect spillage.  |
| P405               | Store locked up.   |
| P501               | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.              |

### 2.3 Other hazards

OSHA HCS 2012: According to US law (29 CFR 1910.1200- Hazard Communication Standard), this material is considered hazardous.

### Canada:

#### 2.1 Classification of the substance or mixture

Very Hazardous- D1A

Other Hazards – D2A

Corrosive – E

#### 2.2 Label elements



## 2.3 Other hazards

In Canada, the product listed above is considered as hazardous according to the Workplace Hazardous Materials Information System (WHMIS).

## 2.4 Other information

Acid batteries used in APC by Schneider Electric Replacement Battery Cartridges (RBCs) are contained within cartridges and are sealed, non-spillable design. Under normal use and handling, there is no contact with the internal components of the battery or the chemical hazards. Under normal use and handling, these products do not emit regulated or hazardous substances. Misuse of the product, such as overcharging, may result in a discharge of battery electrolyte. Classification provided are for the battery electrolyte and are only applicable in the event that the electrolyte is discharged.

## SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

### 3.1 Substances:

The material does not meet the criteria of a substance in accordance with regulation (EC) No 1272/2008

| Chemical Name          | CAS Number | EC Number | Composition (%) | Classification  |
|------------------------|------------|-----------|-----------------|---|
| Lead                   | 7439-92-1  | 231-100-4 | 55,9 – 63,4 %   | Annex VI: Acute Tox. 4, H332; Acute Tox. 4, H302; Repr. 1A, H360df; STOT RE 2, H373; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 |
| Sulfuric acid          | 7664-93-9  | 231-639-5 | 15,8 – 20,5 %   | Annex VI, Table 3.1: Skin Corr. 1A; H314  |
| 1-Propene, homopolymer | 9003-07-0  | --        | 4,8 – 12,3 %    | Not Classified  |
| Amorphous/fused silica | 60676-86-0 | --        | 3,7 – 5,6 %     | Not Classified  |
| Polyvinyl Chloride     | 9002-86-2  | --        | 2,6 %           | Not Classified  |
| Copper                 | 7440-50-8  | 231-159-6 | 2,6 %           | Self Classified: Repr. 2, H361; Eye Irrit. 2, H319; STOT SE 3: Resp. Irrit., H335   |
| Steel                  | --         | --        | 0,4 %           | Not Classified  |
| Tin                    | 7440-31-5  | 231-141-8 | 0,3 %           | Self Classified: STOT SE 3: Resp. Irrit., H335; STOT RE 2 (Lungs, Inhalation), H373; STOT RE 1 (CNS, Liver, Kidney), H372           |
| Polycarbonate          | 27440-31-5 | --        | 0,1 %           | Not Classified  |

See Section 11 for Toxicological Information. See Section 16 for full text of H-statements and R-phrases.

## SECTION 4: FIRST AID MEASURES

### 4.1 Description of first aid measures

#### General information

The following first aid measures are required only in case of exposure to interior battery components after damage of the external battery casing.

Undamaged, closed cells do not represent a danger to the health.

Battery pack containing sealed lead acid batteries

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|                     |  |
|---------------------|--|
| <b>Eye contact</b>  | If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If signs/ symptoms develop, get medical attention.  |
| <b>Inhalation</b>   | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. Do not use mouth-to-mouth if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with one-way valve or other proper respiratory medical device. |
| <b>Skin contact</b> | IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.  |
| <b>Ingestion</b>    | Do NOT induce vomiting. If conscious, drink large quantities of milk or water. Follow with milk of magnesia, beater egg, egg whites or vegetable oil. Get medical attention immediately.   |

#### 4.2 Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information

#### 4.3 Indication of any immediate medical attention and special treatment needed

See section: Description of first aid measures

Notes to Physician: All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred.

### SECTION 5: FIRE-FIGHTING MEASURES

#### 5.1 Extinguishing media

|                                       |   |
|---------------------------------------|---|
| <b>Suitable extinguishing media</b>   | Dry chemical or CO2   |
| <b>Unsuitable extinguishing media</b> | Water should not be used unless from safe distance due to vigorous and exothermic reaction which will result. |

#### 5.2 Special hazards arising from the substance or mixture

|   |   |
|---|---|
| <b>Unusual Fire and Explosion Hazards</b> | Hydrogen and oxygen gases are produced during normal battery operation and charging. These gases escape through the battery vents and may form an explosive atmosphere around the battery if ventilation is poor. Avoid open flame, sparks and other ignition sources in areas where batteries are used and stored. |
| <b>Hazardous Combustion Products</b>      | Acid mists and vapors, toxic fumes from burning plastic.  |

#### 5.3 Advice for firefighters

|   |  |
|---|--|
| <b>Special protective equipment for fire-fighters</b> | Wear complete protective clothing including self-contained breathing apparatus. Wear chemical protective clothing that is specifically recommended by the manufacturer. It may provide little or no thermal protection. Fire fighters to wear acid-resistant full protective clothing, including rubber footwear and self-contained apparatus. |
|---|--|

## SECTION 6: ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

|                                    |   |
|------------------------------------|---|
| <b>For non-emergency personnel</b> | Do not walk through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas. Do not get in eyes, on skin, or on clothing. Do not breathe dusts or mists. |
| <b>For emergency responders</b>    | As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Keep unauthorized personnel away. Do not get water inside container.<br>See also the information in "For nonemergency personnel".  |

### 6.2 Environmental precautions

|                                  |  |
|----------------------------------|--|
| <b>Environmental precautions</b> | Do not discharge into the drains/surface waters/groundwater. |
|----------------------------------|--|

### 6.3 Methods and materials for containment and cleaning up

|              |  |
|--------------|--|
| <b>Spill</b> | Stop leak if you can do it without risk. If battery is leaking, place battery in a heavy duty plastic bag. Contain spill by diking with soda ash, etc. Neutralize spill area with (soda or ash lime, dilute with acetic acid). Make certain mixture is neutral then collect residue and place in a drum or other suitable container. |
|--------------|--|

### 6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

## SECTION 7: HANDLING AND STORAGE

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 7.1 Precautions for safe handling

#### **Advice on safe handling**

Handling: Use only in well ventilated areas. Use caution when combining with water; DO NOT add water to corrosive liquid, ALWAYS add corrosive liquid to water while stirring to prevent release of heat, steam and fumes. Wear appropriate personal protective equipment, avoid direct contact. Do not get in eyes, on skin, or on clothing. Do not breathe mist, vapors, spray. Avoid direct conductive connection across positive and negative terminals to prevent short circuit. Wash thoroughly with soap and water after handling and before eating, drinking, or using tobacco.

## 7.2 Conditions for safe storage, including any incompatibilities

### Requirements for storage rooms and vessels

Batteries should be kept in an upright position away from ignition sources. Stack batteries so as to prevent accidental contact between terminal and/or other damage to terminals or containers. Whenever feasible, store on shipping pallet or rack. Do not stack loaded pallets or racks on top of other batteries. Store in a cool/low temperature, well ventilated place. Avoid storage in areas exposed to heat or solar buildup.

## 7.3 Specific end use(s)

|                        |  |
|------------------------|--|
| <b>Recommendations</b> | Refer to Section 1.2 – Relevant identified uses. |
|------------------------|--|

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

### 8.1 Control parameters

#### Occupational exposure limits

|                                   | Result | NIOSH   | OSHA  |
|-----------------------------------|--------|---|---|
| Tin (7440-31-5)                   | TWAs   | 2 mg/m <sup>3</sup> TWA   | Not established   |
| Copper (7440-50-8)                | TWAs   | 1 mg/m <sup>3</sup> TWA (dust and mist); 0.1 mg/m <sup>3</sup> TWA (fume) | 0.1 mg/m <sup>3</sup> TWA (fume); 1 mg/m <sup>3</sup> TWA (dust and mist) |
| Polyvinyl Chloride (9002-86-2)    | TWAs   | Not established   | Not established   |
| Sulfuric acid (7664-93-9)         | TWAs   | 1 mg/m <sup>3</sup> TWA   | 1 mg/m <sup>3</sup> TWA   |
| Lead as Lead, Inorganic compounds | TWAs   | 0.050 mg/m <sup>3</sup> TWA   | 50 µg/m <sup>3</sup> TWA  |

#### Key to abbreviations

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

#### Additional advice on limit values

During normal charging and discharging there is no release of product.

#### DNELs/DMELs

No DNELs/DMELs available.

#### PNECs

No PNECs available.

### 8.2 Exposure controls

|   |   |
|---|---|
| <b>Appropriate engineering controls</b> | Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. |
|---|---|

## Individual protection measures

|                            |  |
|----------------------------|--|
| <b>Hygiene measures</b>    | When using do not eat, drink or smoke. Wash hands before breaks and after work.                |
| <b>Eye/face protection</b> | Wear eye/face protection – Chemical splash goggles, or – Full-face shield with safety glasses. |

### Skin protection

|  |  |
|--|--|
| <b>Hand protection</b>                 | Acid resistant gloves such as rubber, neoprene, vinyl coated, PVC.   |
| <b>Body protection</b>                 | Acid resistant clothing with rubber/neoprene boots for major spill clean-up. Acid resistant gloves such as rubber, neoprene, vinyl coated, PVC.  |
| <b>Other skin protection</b>           | See Body Protection  |
| <b>Respiratory protection</b>          | Follow the European Standard EN 149. Use of European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.  |
| <b>Environmental exposure controls</b> | Controls should be engineered to prevent release to the environment, including procedures to prevent spills, atmospheric release and release to waterways. Follow best practice for site management and disposal of waste. |

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Appearance

|  |                  |
|--|------------------|
| <b>Physical state</b>                          | Solid            |
| <b>Color</b>                                   | Various          |
| <b>Odor</b>                                    | Data lacking     |
| <b>Odor threshold</b>                          | Data lacking     |
| <b>pH</b>                                      | Not applicable.  |
| <b>Melting point/freezing point</b>            | Not applicable.  |
| <b>Initial boiling point and boiling range</b> | Not applicable.  |
| <b>Flash point</b>                             | Not available.   |
| <b>Evaporation rate</b>                        | Not applicable.  |
| <b>Flammability (solid, gas)</b>               | Not flammable.   |
| <b>Upper/lower explosive limits</b>            | Not applicable.  |
| <b>Vapor pressure</b>                          | Not applicable.  |
| <b>Vapor density</b>                           | Not applicable.  |
| <b>Relative density</b>                        | Not available.   |
| <b>Solubility(ies)</b>                         | Not available.   |
| <b>Partition coefficient: n-octanol/water</b>  | Not applicable.  |
| <b>Auto-ignition temperature</b>               | Not applicable.  |
| <b>Decomposition temperature</b>               | Not applicable.  |
| <b>Viscosity</b>                               | Not applicable.  |
| <b>Explosive properties</b>                    | Not explosive.   |
| <b>Oxidizing properties</b>                    | Not an oxidizer. |



## 9.2 Other information

No additional information.

## SECTION 10: STABILITY AND REACTIVITY

|  |  |
|--|--|
| <b>10.1 Reactivity</b>                         | No dangerous reaction known under conditions of normal use.  |
| <b>10.2 Chemical stability</b>                 | The product is stable under normal temperatures and pressures.   |
| <b>10.3 Possibility of hazardous reactions</b> | Under normal conditions of storage and use, hazardous reactions will not occur.  |
| <b>10.4 Conditions to avoid</b>                | Use only approved charging methods. Avoid overcharging. Avoid short-circuiting. Avoid sparks and other ignition sources. Do not open, break or melt the casing.  |
| <b>10.5 Incompatible materials</b>             | Strong oxidizing or reducing agents.   |
| <b>10.6 Hazardous decomposition products</b>   | Can emit highly toxic fumes when heated. Combustion can produce carbon dioxide and carbon monoxide. Will release an explosive hydrogen/oxygen gas mixture. Oxides of lead, lead and/or lead compounds may be released. Sulfuric acid may release sulfur dioxide and /or sulfur trioxide. |

### Additional information

No decomposition if stored and applied as directed.

## SECTION 11: TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

| Components                     |           |  |
|--------------------------------|-----------|--|
| Sulfuric acid (15.8% to 20.5%) | 7664-93-9 | <b>Acute Toxicity:</b> Ingestion/Oral-Rat LD50 • 2140 mg/kg; Inhalation-Rat LC50 • 510 mg/m <sup>3</sup> 2 Hour(s); <b>Irritation:</b> Eye-Rabbit • 250 µg • Severe irritation; <b>Multi-dose Toxicity:</b> Inhalation-Rat TCLo • 1.8 mg/m <sup>3</sup> 24 Hour(s) 65 Day(s)-Continuous; <b>Peripheral Nerve and Sensation:</b> Recording from peripheral motor nerve; <b>Kidney, Ureter, and Bladder:</b> Changes in both tubules and glomeruli |
| Polyvinyl Chloride (2.6%)      | 9002-86-2 | <b>Tumorigen / Carcinogen:</b> Ingestion/Oral-Rat TDLo • 210 g/kg 30 Week(s)-Continuous; <b>Tumorigenic:</b> Equivocal tumorigenic agent by RTECS criteria; <b>Lungs, Thorax, or Respiration:</b> Tumors; <b>Skin and Appendages:</b> Other: Tumors  |
| Copper (2.6%)                  | 7440-50-8 | <b>Reproductive:</b> Ingestion/Oral-Rat TDLo • 152 mg/kg (22W pre); <b>Reproductive Effects: Effects on Embryo or Fetus:</b> Fetotoxicity (except death, e.g., stunted fetus); <b>Reproductive Effects: Specific Developmental Abnormalities:</b> Central nervous system   |

|                             |   |
|-----------------------------|---|
| <b>Acute toxicity</b>       | Acute Toxicity – Oral 4 – ATEmix= 703.47mg/kg |
| <b>Irritation/Corrosion</b> | Skin Corrosion 1A                             |
| <b>Sensitization</b>        | There is no data available.                   |

|   |  |
|---|--|
| <b>Mutagenicity</b>                                       | There is no data available.                        |
| <b>Carcinogenicity</b>                                    | There is no data available.                        |
| <b>Reproductive toxicity</b>                              | Toxic to Reproduction 1A                           |
| <b>Teratogenicity</b>                                     | There is no data available.                        |
| <b>Specific target organ toxicity (single exposure)</b>   | There is no data available.                        |
| <b>Specific target organ toxicity (repeated exposure)</b> | Specific Target Organ Toxicity Repeated Exposure 2 |
| <b>Aspiration hazard</b>                                  | There is no data available.                        |

Target Organs: Nervous System, Blood, Liver, Kidney

Information on the likely routes of exposure: Dermal contact, Eye contact, Inhalation, Ingestion

## Potential health effects

### Inhalation

|                          |   |
|--------------------------|---|
| <b>Acute (Immediate)</b> | Lead - For industry, inhalation is much more important than is ingestion. Systemic effects include loss of appetite, anemia, malaise, insomnia, headache, irritability, muscle and joint pains, tremors, flaccid paralysis without anesthesia, hallucinations and distorted perceptions, muscle weakness, gastritis and liver changes. Major organ systems affected are the nervous system, blood system and kidneys. Experimental evidence suggests that blood levels of lead below 10 µg/dL can lower the IQ scores of children. Low levels of lead impair neurotransmission and immune system function and may increase systolic blood pressure. Reversible kidney damage can occur from acute exposure. Sulfuric Acid - Experimental poison by inhalation.  |
| <b>Chronic (Delayed)</b> | Lead - Chronic exposure can lead to irreversible vascular sclerosis, tubular cell atrophy, interstitial fibrosis, and glomerular sclerosis. Very heavy intoxication can sometimes be detected by formation of a dark line on the gum margins. Sulfuric acid - Repeated or prolonged inhalation of sulfuric acid mist can cause inflammation of the upper respiratory tract, leading to chronic bronchitis. Severe exposure may cause chemical pneumonitis. Erosion of tooth enamel due to strong acid fume exposure has been observed in industry. Workers exposed to low concentrations of the vapors gradually lose their sensitivity to its irritating action. Occupational exposures to strong-acid mists containing sulfuric acid have been associated with several respiratory tract cancers. However, there is no animal data supporting the carcinogenicity of sulfuric acid. Sulfuric acid has been found to be non-mutagenic, and in two studies of workers employed in lead acid battery manufacture, no association between sulfuric acid mist exposure and respiratory tract cancers was observed. |

### Skin

|                          |   |
|--------------------------|---|
| <b>Acute (Immediate)</b> | Sulfuric Acid - Extremely irritating, corrosive, and toxic to tissue, resulting in rapid destruction of tissue, causing severe burns. If much skin is involved, exposure is accompanied by shock, collapse and symptoms similar to those seen in severe burns. Repeated contact with dilute solutions can cause dermatitis. |
| <b>Chronic (Delayed)</b> | No Data Available   |

### Eye

|                          |                            |
|--------------------------|----------------------------|
| <b>Acute (Immediate)</b> | Causes serious eye damage. |
| <b>Chronic (Delayed)</b> | No Data Available          |

## Ingestion

|                          |   |
|--------------------------|---|
| <b>Acute (Immediate)</b> | Lead - Poison by ingestion in large dosages and with prolonged exposure leading to the same effects as seen in exposure by inhalation. Adults absorb 5-15% of ingested lead and retain less than 5%. Children absorb about 50% and retain about 30%. Sulfuric Acid - Moderately toxic by ingestion. |
| <b>Chronic (Delayed)</b> | No Data Available   |

|                             |   |
|-----------------------------|---|
| <b>Reproductive Effects</b> | Lead - Severe toxicity can cause sterility, abortion, and neonatal mortality and morbidity. Experimental teratogen. Experimental reproductive effects. Pathological lesions have been found on male gonads. Sulfuric Acid - Experimental teratogen. |
| <b>Carcinogenic Effects</b> | Repeated and prolonged exposure may cause cancer.   |

| Carcinogenic Effects              |                   |                              |   |
|-----------------------------------|-------------------|------------------------------|---|
|                                   | CAS               | IARC                         | NTP   |
| Sulfuric acid                     | 7664-93-9         | Group 1-Carcinogenic         | Not Listed                                    |
| Lead                              | 7439-92-1         | Group 2A-Probable Carcinogen | Reasonably Anticipated to be Human Carcinogen |
| Lead as Lead Compounds            | NO DATA AVAILABLE | Not Listed                   | Reasonably Anticipated to be Human Carcinogen |
| Lead as Lead, inorganic compounds | NO DATA AVAILABLE | Group 2A-Probable Carcinogen | Not Listed                                    |

## Other information

Not available.

## SECTION 12: ECOLOGICAL INFORMATION

|   |  |
|---|--|
| <b>12.1 Toxicity</b>                      | Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects |
| <b>12.2 Persistence and degradability</b> | There is no data available.  |
| <b>12.3 Bioaccumulative potential</b>     | There is no data available.  |

### 12.4 Mobility in soil

|  |                    |
|--|--------------------|
| <b>Soil/water partition coefficient (K<sub>oc</sub>)</b> | No data available. |
| <b>Mobility</b>  | Not available.     |

### 12.5 Results of PBT and vPvB assessment

|             |                 |
|-------------|-----------------|
| <b>PBT</b>  | Not applicable. |
| <b>vPvB</b> | Not applicable. |

### 12.6 Other adverse effects

No known significant effects or critical hazards.

## SECTION 13: DISPOSAL CONSIDERATIONS

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

### 13.1 Waste treatment methods

#### Product

|                            |   |
|----------------------------|---|
| <b>Methods of disposal</b> | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. |
| <b>Hazardous waste</b>     | There is no data available.   |

#### Packaging

|                            |   |
|----------------------------|---|
| <b>Methods of disposal</b> | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. |
| <b>Special precautions</b> | There is no data available.   |

## SECTION 14: TRANSPORT INFORMATION

Battery packs may be shipped alone, within uninterruptible power supplies (UPSs) or battery cabinets. The non-spillable lead acid batteries used in these battery packs are:

- Certified by their manufacturers as capable of withstanding the IATA/ICAO Vibration and Pressure Differential Test and that at a temperature of 55 degrees Centigrade, the electrolyte will not flow from a ruptured or cracked case and there is no free liquid to flow. Schneider Electric only authorizes the use of batteries that meet these criteria. Applicable certifications and test reports are available upon request.
- Packaged in accordance with the requirements of ADR/RID special provision 598, IMDG special provision 238 and IATA-DGR special provision A67 when shipped inside a UPS or packaged in accordance with the requirements of ADR/RID special provision 598, IMDG special provision 238 and IATA-DGR special provision A67 when shipped inside a UPS or shipped in their original battery pack packaging. When they are shipped inside the UPS or in their original packaging, then they are:
  - Secured in such a way that they cannot slip, fall or be damaged;
  - When weighing greater than 2.5 kg, provided with carrying devices, unless they are suitably stacked, e.g. on pallets;
  - Free of dangerous traces of alkalis or acids on the outside; and protected against short circuits.
  - Outer packaging may be marked "NONSPILLABLE" or "NONSPILLABLE BATTERY." When not marked, the outer packaging needs to be marked with one of these two phrases.
  - Shipment by air requires on Master Air Waybill the following endorsement in the "Nature and Quantity of Good" box: "Not Restricted as per Special Provision A67"

Please note that if the Battery Pack or UPS containing the Battery pack is not shipped in the original packaging or no longer meets any of the referenced requirements above, then the package must be shipped as follows:

|           | 14.1 UN number | 14.2 UN proper shipping name  | 14.3 Transport hazard class(es) | 14.4 Packing group | 14.5 Environmental hazards |
|-----------|----------------|-------------------------------|---------------------------------|--------------------|----------------------------|
| DOT       | UN2800         | Batteries, Wet, Non-spillable | Hazard Class 8                  | Packing Group II   |                            |
| TDG       | UN2800         | Batteries, Wet, Non-spillable | Hazard Class 8                  | Packing Group II   |                            |
| IMO/IMDG  | UN2800         | Batteries, Wet, Non-spillable | Hazard Class 8                  | Packing Group II   |                            |
| IATA/ICAO | UN2800         | Batteries, Wet, Non-spillable | Hazard Class 8                  | Packing Group II   |                            |

### Special precautions for user

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage

### Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not available

## SECTION 15: REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazardous Classifications: Acute Chronic

| Inventory              |            |            |             |           |          |      |
|------------------------|------------|------------|-------------|-----------|----------|------|
| Component              | CAS        | Canada DSL | Canada NDSL | EU EINECS | EU ENICS | TSCA |
| 1-propene, homopolymer | 9003-07-0  | Yes        | No          | No        | Yes      | Yes  |
| Amorphous/fused silica | 60676-86-0 | Yes        | No          | Yes       | No       | Yes  |
| Calcium                | 7440-70-2  | Yes        | No          | Yes       | No       | Yes  |
| Copper                 | 7440-50-8  | Yes        | No          | Yes       | No       | Yes  |
| Lead                   | 7439-92-1  | Yes        | No          | No        | No       | Yes  |
| Polycarbonate          | 25037-45-0 | Yes        | No          | No        | Yes      | Yes  |
| Polyvinyl Chloride     | 9002-86-2  | Yes        | No          | Yes       | No       | Yes  |
| Sulfuric Acid          | 7664-93-9  | Yes        | No          | Yes       | No       | Yes  |
| Tin                    | 7440-31-5  | Yes        | No          | Yes       | No       | Yes  |

| <b>CANADA</b>  |           |  |
|--|-----------|--|
| <b>WHMIS - Classifications of Substances</b>                                     |           |  |
| Copper   | 7440-50-8 | Part 1, Group 1 Substance  |
| Copper as Copper compounds   |           | Part 1, Group 1 Substance  |
| Sulfuric acid  | 7664-93-9 | Part 1, Group 1 Substance<br>Part 1, Group 4 Substance   |
| Lead   | 7439-92-1 | (Does not include lead compounds contained in stainless steel, brass, or bronze alloys)  |
| Lead as Lead compounds   |           | Part 1, Group 4 Substance (Does not include lead compounds contained in stainless steel, brass, or bronze alloys)  |
| <b>Canada - 2005 NPRI (National Pollutant Release Inventory)</b>                 |           |  |
| Copper   | 7440-50-8 | Part 1, Group 1 Substance  |
| Copper as copper compounds   |           | Part 1, Group 1 Substance  |
| Sulfuric acid  | 7664-93-9 | Part 1, Group 1 Substance  |
| Lead   | 7439-92-1 | Part 1, Group 4 Substance  |
| Lead as Lead compounds   |           | Part 1, Group 4 Substance  |
| <b>Canada - CEPA - Priority Substances List</b>                                  |           |  |
| No substance Listed  |           |  |
| <b>Canada - DWQ (Drinking Water Quality) - IMACs</b>                             |           |  |
| No substance Listed  |           |  |
| <b>Canada - Accelerated Reduction/Elimination of Toxics (ARET)</b>               |           |  |
| No substance Listed  |           |  |
| <b>Canada - New Brunswick - Ozone Depleting Substances - Schedule A</b>          |           |  |
| No substance Listed  |           |  |
| <b>Canada - New Brunswick - Ozone Depleting Substances - Schedule B</b>          |           |  |
| No substance Listed  |           |  |
| <b>UNITES STATES</b>   |           |  |
| <b>U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals</b>      |           |  |
| No substance Listed  |           |  |
| <b>U.S. - OSHA – Specifically regulated Chemicals</b>                            |           |  |
| Lead   | 7439-92-1 | 30 µg/m <sup>3</sup> Action Level (See 29 CFR 1910.1025); 50 µg/m <sup>3</sup> TWA (See 29 CFR 1910.1025)  |
| Lead as Lead, inorganic compounds  |           | 30 µg/m <sup>3</sup> Action Level (See 29CFR 1910.1025, as Pb); 50 µg/m <sup>3</sup> TWA (See 29 CFR 1910.1025, as Pb)   |
| <b>U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants</b>                |           |  |
| No substance Listed  |           |  |
| <b>U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities</b> |           |  |
| Copper   | 7440-50-8 | 5000 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 2270 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm) |
| Sulfuric acid  | 7664-93-9 | 1000 lb final RQ; 454 kg final RQ  |
| Lead   | 7439-92-1 | 10 lb final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm); 4.54 kg final RQ (no reporting of releases of this hazardous substance is required if the diameter of the pieces of the solid metal released is >100 µm)   |
| <b>U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities</b>        |           |  |
| No substance Listed  |           |  |
| <b>U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs</b> |           |  |
| Sulfuric acid  | 7664-93-9 | 1000 lb EPCRA RQ   |

| U.S. - CERCLA/SARA - Section 313 - Emission Reporting |           |  |
|---|-----------|--|
| Copper  | 7440-50-8 | 1.0 % de minimis concentration   |
| Copper as copper compounds                            |           | 1.0 % de minimis concentration (This category does not include CAS numbers 147-14-8, 1328-53-6, or 14302-13-7, or copper phthalocyanine compounds that are substituted with only hydrogen and/or chlorine and/or bromine.) |
| Sulfuric acid   | 7664-93-9 | 1.0 % de minimis concentration (acid aerosols including mists, vapors, gas, fog, and other airborne forms of any particle size)  |
| Lead  | 7439-92-1 | 0.1 % Supplier notification limit; 0.1 % de minimis concentration (when  |

|                                   |  |  |
|-----------------------------------|--|--|
|                                   |  | contained in stainless steel, brass, or bronze)            |
| Lead as Lead, inorganic compounds |  | 0.1 % Supplier notification limit (Chemical Category N420) |

#### U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing

|                        |           |  |
|------------------------|-----------|--|
| Lead                   | 7439-92-1 | 100 lb RT (this lower threshold does not apply to lead when it is contained in stainless steel, brass or bronze alloy) |
| Lead as Lead compounds |           | 100 lb RT  |

#### U.S. - California - Proposition 65 - Carcinogens List

|                        |           |                                  |
|------------------------|-----------|----------------------------------|
| Lead                   | 7439-92-1 | carcinogen, initial date 10/1/92 |
| Lead as Lead compounds |           | carcinogen, initial date 10/1/92 |

#### U.S. - California - Proposition 65 - Developmental Toxicity

|                                   |           |  |
|-----------------------------------|-----------|--|
| Lead                              | 7439-92-1 | developmental toxicity, initial date 2/27/87 |
| Lead as Lead, inorganic compounds |           | developmental toxicity, initial date 2/27/87 |

#### U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)

|      |           |                 |
|------|-----------|-----------------|
| Lead | 7439-92-1 | 0.5 µg/day MADL |
|------|-----------|-----------------|

#### U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)

|      |           |                       |
|------|-----------|-----------------------|
| Lead | 7439-92-1 | 15 µg/day NSRL (oral) |
|------|-----------|-----------------------|

#### U.S. - California - Proposition 65 - Reproductive Toxicity - Female

|      |           |  |
|------|-----------|--|
| Lead | 7439-92-1 | female reproductive toxicity, initial date 2/27/87 |
|------|-----------|--|

#### U.S. - California - Proposition 65 - Reproductive Toxicity - Male

|      |           |  |
|------|-----------|--|
| Lead | 7439-92-1 | male reproductive toxicity, initial date 2/27/87 |
|------|-----------|--|

## 15.2 Chemical Safety Assessment

This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: OTHER INFORMATION

Review date: October, 18th, 2017

Version: 1.3

### Abbreviations and acronyms:

- H319 - Causes serious eye irritation
- H332 - Harmful if inhaled
- H335 - May cause respiratory irritation
- H361 - Suspected of damaging fertility or the unborn child.
- H372 - Causes damage to organs through prolonged or repeated exposure.
- R36/37 - Irritating to eyes and respiratory system.
- R38 - Irritating to skin.
- R48/20 - Harmful: danger of serious damage to health by prolonged exposure through inhalation.
- R63 - Possible risk of harm to the unborn child.

Battery pack containing sealed lead acid batteries

15 to 16

Version: 1.3

Date: October 18th, 2017

Note 1 -- GHS and OSHA requirements for SDSs: *Schneider Electric* is committed to providing customers with products that are fully compliant with all regulations, international protocols, and customer standards to which they are subject. This includes providing Safety Data Sheets (SDSs) when required by the Occupational and Safety and Health Administration (OSHA), Department of Transportation (DOT), the Environmental Protection Agency (EPA) and other regulatory authorities

Schneider Electric does not issue SDSs for products –except for battery cartridges – because they are defined as “articles” pursuant to the guidance of the U.S. Occupational Health & Safety Administration (OSHA). Specifically, OSHA provides in the definition of "article" in 29 CFR 1910.1200 and similar provisions within the Global Harmonized Standard:

An "article" means a manufactured item: (1) which is formed to a specific shape or design during manufacture (2) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (3) which does not release, or otherwise result in exposure to, a [hazardous chemical](#) under normal conditions of use. Any product which meets the definition of an "article," would be exempt from the requirements of the Standard.

OSHA has indicated that batteries do not meet the standard of an “article” and that SDS must be provided for the replacement battery cartridges that are contained within APC products or purchased as replacement battery cartridges. Please note that the one MSDS covers all manufacturers typically provide a single MSDSs to cover each battery chemistries they supply. These MSDSs are applicable to the battery models that utilize the specific battery chemistry (e.g., lead-acid, lithium ion, NiMH).

Note 2 – Battery packs covered by this SDSs can be shipped alone, contained within and uninterruptible power supply or battery cabinet. Schneider Electric does not issue SDSs for uninterruptible power supplies or battery cabinets.

Every endeavor has been made to ensure that the information contained in this publication is reliable and offered in good faith. It is meant to describe the safety requirements of our products and should not be construed as guaranteeing specific properties. Customers are encouraged to conduct their own tests as end user suitability of the product for particular uses is beyond our control. The information is not intended as an inducement to bargain and no warranty expressed or implied is made as to its accuracy, reliability or completeness. Schneider Electric Incorporated accepts no liability for loss, injury or damage arising from reliance upon the information contained in this data sheet except in conjunction with the proper use of the product to which it refers. Due care should be taken that the use and disposal of this product is in compliance with appropriate Federal, State and Local Government regulations

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