



# Battery pack containing sealed lead acid batteries MATERIAL SAFETY DATASHEET

Version: 1  
Review date: January, 13<sup>th</sup> 2020

## SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

|                                |   |
|--------------------------------|---|
| <b>GHS product identifier:</b> | Battery pack containing sealed lead acid batteries  |
| <b>Other Names:</b>            | Battery pack or accumulator pack with Valve Regulated Lead Acid Battery - Wet, Non-Spillable  |
| <b>Model Numbers:</b>          | HYC XXYYYY whee XX is the volt of battery ( 6 or 12) ,YYYY is the battery capacity  |
| <b>Country:</b>                | CHINA   |
| <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. |

### Identified uses

Relevant identified use(s) : Electric Storage Battery  
Use(s) advised against: Transportation

### Manufacturer

|                               |  |
|-------------------------------|--|
| <b>Supplier/Manufacturer:</b> | JIANG XI JIN YUAN HUANYU POWER SOURCE LTD.                                       |
| <b>Address:</b>               | Building2 xintang Industrial park,Fuyong town,Baoan district,Shenzhen city,China |
| <b>Telephone:</b>             | 86-755-23071981  |
| <b>Website:</b>               | www.jyhybattery.com  |

### Emergency telephone number (with hours of operation)

86-755-23071981

## SECTION 2: Hazards identification

### United States (US)

According to OSHA 29 CFR 1910.1200 HCS

#### 2.1 Classification of the substance or mixture:

Skin Corrosion 1A - H314  
Serious Eye Damage 1 - H318  
Carcinogenicity 2 - H351  
Reproductive Toxicity 1A - H360  
Specific Target Organ Toxicity Repeated Exposure 1 - H372

#### 2.2 GHS label elements:

Signal Word: DANGER



Hazard Statements:

|             |   |
|-------------|---|
| <b>H314</b> | Causes severe skin burns and eye damage .   |
| <b>H318</b> | Causes serious eye damage.  |
| <b>H351</b> | Suspected of causing cancer.  |
| <b>H360</b> | May damage fertility or the unborn child.   |
| <b>H372</b> | Causes damage to organs - nervous system/blood/liver/kidneys through prolonged or repeated exposure . |

Precautionary statements

Prevention

|             |   |
|-------------|---|
| <b>P201</b> | Obtain special instructions before use                                    |
| <b>P202</b> | Do not handle until all safety precautions have been read and understood. |
| <b>P260</b> | Do not breathe mist/vapours/spray   |
| <b>P264</b> | Wash thoroughly after handling  |
| <b>P270</b> | Do not eat, drink or smoke when using this product.                       |
| <b>P280</b> | Do not eat, drink or smoke when using this product. -                     |

Response

|                       |  |
|-----------------------|--|
| <b>P304+P340</b>      | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.                                 |
| <b>P303+P361+P353</b> | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. -                            |
| <b>P310</b>           | Immediately call a POISON CENTER or doctor/physician   |
| <b>P321</b>           | Specific treatment, see supplemental first aid information.  |
| <b>P363</b>           | Wash contaminated clothing before reuse.   |
| <b>P305+P351+P338</b> | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| <b>P301+P330+P331</b> | IF SWALLOWED: Rinse mouth. Do NOT induce vomiting  |
| <b>P308+P313</b>      | IF exposed or concerned: Get medical advice/attention.   |
| <b>P314</b>           | Get medical advice/attention if you feel unwell  |

Storage/Disposal

|             |  |
|-------------|--|
| <b>P405</b> | Store locked up.   |
| <b>P501</b> | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations |

**2.3 Other hazards**

OSHA HCS 2012: Under United States Regulations (29 CFR 1910.1200- Hazard Communication Standard), this product is considered hazardous.

Battery pack containing sealed lead acid batteries

Version: 1

Date: 2020-01-07

## Canada

### According to WHMIS

#### 2.1 Classification of the substance or mixture:

Very Toxic - D1A  
Other Toxic Effects - D2A  
Corrosive - E

#### 2.2 GHS label elements:



#### 2.3 Other Hazards

In Canada, the product mentioned above is considered hazardous under 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 is 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 (%) | LD50/LC50   | Classification OSHA HCS 2012  |
|------------------------|------------|-----------|-----------------|---|---|
| Lead                   | 7439-92-1  | 231-100-4 | 55,9 – 63,4 %   | NO DATA AVAILABLE   | Repr. 1A; STOT RE 1 (Liver, Kidney, Blood, Nervous system); Carc. 2 |
| Sulfuric acid          | 7664-93-9  | 231-639-5 | 15,8 – 20,5 %   | Inhalation-Rat LC50 • 510 mg/m <sup>3</sup> 2 Hour(s)<br>Ingestion/Oral-Rat LD50 • 2140 mg/kg | Eye Dam. 1; Skin Corr. 1A   |
| 1-Propene, homopolymer | 9003-07-0  | --        | 4,8 – 12,3 %    | Ingestion/Oral-Rat LD50 • >8 g/kg   | Not Classified  |
| Amorphous/fused silica | 60676-86-0 | --        | 3,7 – 5,6 %     | NO DATA AVAILABLE   | Not Classified  |
| Polyvinyl Chloride     | 9002-86-2  | --        | 2,6 %           | NO DATA AVAILABLE   | Not Classified  |
| Copper                 | 7440-50-8  | 231-159-6 | 2,6 %           | NO DATA AVAILABLE   | Repr. 2, STOT SE 3: Resp. Irrit.; Eye Irrit. 2;                     |
| Steel                  | --         | --        | 0,4 %           | NO DATA AVAILABLE   | Not Classified  |

Battery pack containing sealed lead acid batteries

Page 3 to 14

Version: 1

Date: 2020-01-07

|               |            |           |       |                   |  |
|---------------|------------|-----------|-------|-------------------|--|
| Tin           | 7440-31-5  | 231-141-8 | 0,3 % | NO DATA AVAILABLE | STOT SE 3: Resp. Irrit.; STOT RE 2 (Lungs, Inhalation); STOT RE 1 (CNS, Liver, Kidney) |
| Polycarbonate | 27440-31-5 | --        | 0,1 % | NO DATA AVAILABLE | 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

|                   |   |
|-------------------|---|
| <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 method if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. |
| <b>Skin</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>Eye</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>Ingestion</b>  | Do NOT induce vomiting. If conscious, drink large quantities of milk or water. Follow with milk of magnesia, beaten 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

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 CO <sub>2</sub> .   |
| <b>Unsuitable Extinguishing Media</b> | Water should not be used unless from a 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 or stored. |
| <b>Hazardous Combustion Products</b>      | Acid mists and vapors, toxic fumes from burning plastic.   |

### 5.3 Advice for firefighters

Fire fighters should 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 breathing apparatus.

## SECTION 6: Accidental release measures

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

|                             |   |
|-----------------------------|---|
| <b>Personal Precautions</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>Emergency Procedures</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.   |

### 6.2 Environmental precautions

Avoid run off to waterways and sewers.

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

|                                      |   |
|--------------------------------------|---|
| <b>Containment/Clean-up Measures</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 ash or 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

Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 – Disposal Considerations

## SECTION 7: Handling and storage

### 7.1 Precautions for 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

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)

Refer to Section 1.2 - Relevant identified uses.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

| Exposure Limits/Guidelines        |        |   |   |   |
|-----------------------------------|--------|---|---|---|
|                                   | Result | ACGIH   | NIOSH   | OSHA  |
| Tin (7440-31-5)                   | TWAs   | 2 mg/m <sup>3</sup> TWA                       | 2 mg/m <sup>3</sup> TWA   | Not established   |
| Copper (7440-50-8)                | TWAs   | 0.2 mg/m <sup>3</sup> TWA (fume)              | 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   | 1 mg/m <sup>3</sup> TWA (respirable fraction) | Not established   | Not established   |
| Sulfuric acid (7664-93-9)         | TWAs   | 0.2 mg/m <sup>3</sup> TWA (thoracic fraction) | 1 mg/m <sup>3</sup> TWA   | 1 mg/m <sup>3</sup> TWA   |
| Lead as Lead, Inorganic compounds | TWAs   | 0.05 mg/m <sup>3</sup> TWA                    | 0.050 mg/m <sup>3</sup> TWA   | 50 µg/m <sup>3</sup> TWA  |

### 8.2 Exposure controls

Engineering Measures/Controls: 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.

#### Personal Protective Equipment

|  |  |
|--|--|
| <b>Respiratory</b>                     | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced. |
| <b>Eye/Face</b>                        | Wear eye/face protection - Chemical splash goggles, or - Full-face shield with safety glasses.   |
| <b>Skin/Body</b>                       | Acid resistant clothing with rubber/neoprene boots for major spill clean-up. Acid resistant gloves such as rubber, neoprene, vinyl coated, PVC.  |
| <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. |

#### Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

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

## SECTION 9: Physical and chemical properties

### 9.1 Information on Physical and Chemical Properties

| Material Description                |                 |                        |                 |
|-------------------------------------|-----------------|------------------------|-----------------|
| Physical Form                       | Solid           | Appearance/Description | Shaped article. |
| Color                               | Data lacking    | Odor                   | Data lacking    |
| Odor Threshold                      | Data lacking    |                        |                 |
| General Properties                  |                 |                        |                 |
| Boiling Point                       | Data lacking    | Melting Point          | Data lacking    |
| Decomposition Temperature           | Data lacking    | pH                     | Data lacking    |
| Specific Gravity/Relative Density   | Data lacking    | Water solubility       | Data lacking    |
| Viscosity                           | Data lacking    | Explosive Properties   | Not Explosive   |
| Oxidizing Properties :              | Not an oxidizer |                        |                 |
| Volatility                          |                 |                        |                 |
| Vapor Pressure                      |                 | Vapor Density          |                 |
| Evaporation Rate                    |                 |                        |                 |
| Flammability                        |                 |                        |                 |
| Flash Point                         | Data lacking    | UEL                    | Data lacking    |
| LEL                                 | Data lacking    | Auto ignition          | Data lacking    |
| Flammability (solid, gas)           | Not flammable.  |                        |                 |
| Environmental                       |                 |                        |                 |
| Octanol/Water Partition coefficient | Data lacking    |                        |                 |

### 9.2 Other Information

No additional physical and chemical parameters noted.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

### 10.2 Chemical stability

Stable under normal temperatures and pressures

### 10.3 Possibility of hazardous reactions

No Data Available

### 10.4 Conditions to avoid

Use only approved charging methods. Avoid overcharging. Avoid short-circuiting. Avoid sparks and other ignition sources. Do not open, break or melt the casing.

### 10.5 Incompatible materials

Strong oxidizing or reducing agents.

### 10.6 Hazardous decomposition products

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.

## 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 TLo • 1.8 mg/m <sup>3</sup> 24 Hour(s) 65 Day(s)-Continuous; <i>Peripheral Nerve and Sensation:</i> <b>Recording from peripheral motor nerve; Kidney, Ureter, and Bladder: Changes in both tubules and glomeruli</b> |
| Polyvinyl Chloride (2.6%)      | 9002-86-2 | <b>Tumorigen / Carcinogen:</b> Ingestion/Oral-Rat TDLo • 210 g/kg 30 Week(s)-Continuous; <i>Tumorigenic:</i> <b>Equivocal tumorigenic agent by RTECS criteria; Lungs, Thorax, or Respiration: Tumors; Skin and Appendages: Other: Tumors</b>  |
| Copper (2.6%)                  | 7440-50-8 | <b>Reproductive:</b> Ingestion/Oral-Rat TDLo • 152 mg/kg (22W pre); <i>Reproductive Effects: Effects on Embryo or Fetus:</i> <b>Fetotoxicity (except death, e.g., stunted fetus); Reproductive Effects: Specific Developmental Abnormalities: Central nervous system</b>  |

| GHS Properties                | Classification  |
|-------------------------------|---|
| Acute toxicity                | <b>EU/CLP</b> • Acute Toxicity - Oral 4 - ATEmix = 703.47 mg/kg<br><b>OSHA HCS 2012</b> • Classification criteria not met                       |
| Aspiration Hazard             | <b>EU/CLP</b> • Classification criteria not met<br><b>OSHA HCS 2012</b> • Classification criteria not met                                       |
| Carcinogenicity               | <b>EU/CLP</b> • Classification criteria not met<br><b>OSHA HCS 2012</b> • Carcinogenicity 2   |
| Germ Cell Mutagenicity        | <b>EU/CLP</b> • Classification criteria not met<br><b>OSHA HCS 2012</b> • Classification criteria not met                                       |
| Skin corrosion/Irritation     | <b>EU/CLP</b> • Skin Corrosion 1A<br><b>OSHA HCS 2012</b> • Skin Corrosion 1A   |
| Skin sensitization            | <b>EU/CLP</b> • Classification criteria not met<br><b>OSHA HCS 2012</b> • Classification criteria not met                                       |
| STOT-RE                       | <b>EU/CLP</b> • Specific Target Organ Toxicity Repeated Exposure 2<br><b>OSHA HCS 2012</b> • Specific Target Organ Toxicity Repeated Exposure 1 |
| STOT-SE                       | <b>EU/CLP</b> • Classification criteria not met<br><b>OSHA HCS 2012</b> • Classification criteria not met                                       |
| Toxicity for Reproduction     | <b>EU/CLP</b> • Toxic to Reproduction 1A<br><b>OSHA HCS 2012</b> • Toxic to Reproduction 1A   |
| Respiratory sensitization     | <b>EU/CLP</b> • Classification criteria not met<br><b>OSHA HCS 2012</b> • Classification criteria not met                                       |
| Serious eye damage/Irritation | <b>EU/CLP</b> • Classification criteria not met<br><b>OSHA HCS 2012</b> • Serious Eye Damage 1  |

Target Organs : Nervous System, Blood, Liver, Kidney

Route(s) of entry/exposure : Inhalation, Skin, Eye, 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                                    |

## SECTION 12: Ecological information

### 12.1 Toxicity

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects

### 12.2 Persistence and degradability

Material data lacking.

### 12.3 Bioaccumulative potential

Material data lacking.

### 12.4 Mobility in Soil

Material data lacking.

### 12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment has not been conducted for this material.

### 12.6 Other adverse effects

No studies have been found.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

|                        |   |
|------------------------|---|
| <b>Product waste</b>   | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. |
| <b>Packaging waste</b> | Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. |

## SECTION 14: Transport information

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:
  - o Secured in such a way that they cannot slip, fall or be damaged;
  - o When weighing greater than 2.5 kg, provided with carrying devices, unless they are suitably stacked, e.g. on pallets;

Battery pack containing sealed lead acid batteries

Page 10 to 14

Version: 1

Date: 2020-01-07

- o Free of dangerous traces of alkalis or acids on the outside; and protected against short circuits.
- o 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.
- o 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 |
|------------------|----------------|------------------------------|---------------------------------|--------------------|----------------------------|
| <b>DOT</b>       | UN280 0        | Batteries Wet, Non-spillable | Hazard Class 8                  | Packing Group II   |                            |
| <b>TDG</b>       | UN280 0        | Batteries Wet, Non-spillable | Hazard Class 8                  | Packing Group II   |                            |
| <b>IMO/IMDG</b>  | UN280 0        | Batteries Wet, Non-spillable | Hazard Class 8                  | Packing Group II   |                            |
| <b>IATA/ICAO</b> | UN280 0        | Batteries Wet, Non-spillable | Hazard Class 8                  | Packing Group II   |                            |

## SECTION 15: Regulatory information

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

SARA Hazard Classifications: Acute Chronic

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

#### CANADA

##### WHMIS - Classifications of Substances

|  |           |   |
|--|-----------|---|
| 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   |

Battery pack containing sealed lead acid batteries

Page 11 to 14

Version: 1

Date: 2020-01-07

|   |           |  |
|---|-----------|--|
| 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   |           |  |
| U.S. - OSHA – Specifically regulated Chemicals                              |           |  |
| 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   |           |  |
| U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities   |           |  |
| 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   |           |  |
| U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs   |           |  |
| Sulfuric acid   | 7664-93-9 | 1000 lb EPCRA RQ   |
| <b>U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs</b> |           |  |
| Sulfuric acid   | 7664-93-9 | 1000 lb TPQ  |
| <b>U.S. - CERCLA/SARA - Section 313 - Emission Reporting</b>                |           |  |
| 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<br>(Chemical Category N420)  |
| <b>U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing</b>                   |           |  |
| 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  |
| <b>U.S. - California - Proposition 65 - Carcinogens List</b>                     |           |  |
| Lead   | 7439-92-1 | carcinogen, initial date 10/1/92   |
| Lead as Lead compounds   |           | carcinogen, initial date 10/1/92   |
| <b>U.S. - California - Proposition 65 - Developmental Toxicity</b>               |           |  |
| Lead   | 7439-92-1 | developmental toxicity, initial date 2/27/87   |
| Lead as Lead, inorganic compounds  |           | developmental toxicity, initial date 2/27/87   |
| <b>U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)</b> |           |  |
| Lead   | 7439-92-1 | 0.5 µg/day MADL  |
| <b>U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)</b>    |           |  |
| Lead   | 7439-92-1 | 15 µg/day NSRL (oral)  |
| <b>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</b>       |           |  |
| Lead   | 7439-92-1 | female reproductive toxicity, initial date 2/27/87   |
| <b>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</b>         |           |  |
| Lead   | 7439-92-1 | male reproductive toxicity, initial date 2/27/87   |

## 15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

## 15.3 Other Information

WARNING: This product contains a chemical known to the State of California to cause cancer, birth defects, or other reproductive harm

## SECTION 16: Other information

Review date: January, 13<sup>th</sup>, 2020  
Version: 1

### Relevant Phrases (code & full text)

- 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.

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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