

LI-ION BATTERY PACK (APC Smart-UPS Li-Ion, Short Depth UPS, 400VA-500VA) PRODUCT SAFETY DATA SHEET

Version: 1.4

Review date: August 3, 2020

SECTION 1: IDENTIFICATION

Product identifier:

Product name:	LI-ION BATTERY PACK (SCL500RM1UC, SCL500RM1NC, SCL500RM1UNC, SCL400RMJ1U, SCL500RMI1U, SCL500RMI1UC, SCL500RMI1UNC)
Other names:	APC Smart-UPS Li-lon, Short Depth 500VA, 120V and 230V with SmartConnect, APC Smart-UPS Li-lon, Short Depth 400VA, 100V, 33 WH Li-ion Battery Pack Packed With Equipment
Model Numbers:	SCL500RM1UC, SCL500RM1NC, SCL500RM1UNC, SCL400RMJ1U, SCL500RMI1U, SCL500RMI1UNC
Country:	USA/Canada Format, Worldwide Distribution
Product type:	Solid
Picture: APC Smart-UPS Li-Ion, Short Depth UPS, 400VA-500VA	5 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Identified uses

Lithium-Ion battery pack APC by Schneider Electric Uninterruptible Power Supplies

Manufacturer

Supplier/Manufacturer:	Schneider Electric IT USA (formerly APC by Schneider Electric, APC Sales and Service
	Corp.)
Address:	132 Fairgrounds Road West Kingston, RI 02892, USA /
	SEIT- CA, c/o 210080, PO Box 11728, SUCC. Centre-Ville, Montreal, QC, H3C 6P7132
Telephone:	+1 800-788-2208 or +1 401-789-5735
E-mail:	http://nam-en.apc.com/app/ask
Website:	www.APC.com
Telecopy:	Not available.

Emergency telephone number (with hours of operation)

For all Service, Technical Support and Emergency Inquires. 800-255-3924 USA and 1-813-248-0585 International

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SECTION 2: HAZARDS IDENTIFICATION

OSHA Hazard Communication Status: This material is not considered hazardous by the OSHA Hazard Communication Standard 29 CFR 1910.1200.

Carcinogenicity (NTP): Not listed
Carcinogenicity (IARC): Not listed
Carcinogenicity (OSHA): Not listed

Classification of the substance or mixture:

Not classified.

GHS label elements:

Signal word: No signal word.

Hazard statements: No known significant effects or critical hazards.

Precautionary statements

Prevention:	Not applicable
Response	Not applicable
Storage	Not applicable
Disposal	Not applicable

Hazards not otherwise classified (HNOC)

Physical hazards not otherwise classified (PHNOC): None known.

Health hazards not otherwise classified (HHNOC): In case of cell damage, possible release of dangerous

substances and a flammable gas mixture.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture.

Other means of identification: Not available.

CAS number/other identifiers

Product/ingredient name	Identifiers	%	Classification OSHA HCS 2015
Lithium Iron Phosphate (LiFePO4)	CAS: 15365-14-7	25-35	Eye, Skin, Respiratory Irritant
Carbon, as Graphite	CAS: 7440-44-0	12-18	Eye, Skin, Respiratory Irritant
Aluminum Metal	CAS: 7429-90-5	3-7	Inert
Copper Metal	CAS: 7440-50-8	≥10 - <30	Inert
Electrolyte (*)	Mixture	12-17	Mixture: Flammable; Reactive; Sensitizer; Eye, Skin & Respiratory Irritant

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Further Information

For information purposes:

(*) Main ingredients: Lithium hexafluorophosphate, organic carbonates

Because of the cell structure the dangerous ingredients will not be available if used properly.

 $\begin{tabular}{lll} Mercury content: & Hg < 0.1mg/kg \\ Cadmium content: & Cd < 1mg/kg \\ Lead content: & Pb < 10mg/kg \\ \end{tabular}$

SECTION 4: 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.

Description of necessary first aid measures

Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Seek medical treatment by eye specialist.
Inhalation	Ensure of fresh air. Consult a physician.
Skin contact	In case of contact with skin wash off immediately with plenty of water. Consult a physician.
Ingestion	Drink plenty of water. Call a physician immediately.

Most important symptoms/effects, acute and delayed Potential acute health effects

Eye contact	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact	No known significant effects or critical hazards.
Inhalation	No known significant effects or critical hazards.
Skin contact	No known significant effects or critical hazards.
Ingestion	No known significant effects or critical hazards.

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Indication of immediate medical attention and special treatment needed, if necessary

Notes to physician	none
Specific treatments	No specific treatment
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training

See toxicological information (Section 11)

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media	Cold water and dry powder in large amount are applicable. Use metal fire extinction powder or dry sand if only few cells are involved.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	May form hydrofluoric acid if electrolyte comes into contact with water.
Hazards thermal decomposition products	In case of fire, the formation of the following flue gases cannot be excluded: Hydrogen fluoride (HF), Carbon monoxide and carbon dioxide.
Special protective actions for fire-fighters	If possible, remove cell(s) from firefighting area. If heated above 125°C, cell(s) can explode/vent. Cell is not flammable but internal organic material will burn if the cell is incinerated.
Special protective equipment for fire-fighters	Wear self-contained breathing apparatus and protective suit.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Use personal protective clothing. Avoid contact with skin, eyes and clothing. Avoid breathing fume and gas.
For emergency responders	Take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".
Environmental precautions	Do not discharge into the drains/surface waters/groundwater.

Methods and materials for containment and cleaning up

Take up mechanically and send for disposal.

Note: See Section 1 for emergency contact information and Section 13 for waste disposal.

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SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8).
Advice on safe handling	Avoid short circuiting the cell. Avoid mechanical damage of the cell. Do not open or disassemble. Advice on protection against fire and explosion Keep away from open flames, hot surfaces and sources of ignition.
Conditions for safe storage, including any incompatibilities	Storage at room temperature at approx. 20°C, 60% of the nominal capacity (OCV approx. 3.6 - 3.9 V). Keep in closed original container.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

United States Occupational exposure limits

None

Canada

None

Appropriate	No specific precautions necessary.
engineering controls	
Environmental exposure controls	No specific precautions necessary.

Individual protection measures

Hygiene measures	When using do not eat, drink or smoke. Wash hands before breaks and after work.		
Eye/face protection	No specific precautions necessary.		
Hand protection	No specific precautions necessary.		
Body protection	No specific precautions necessary.		
Other skin protection	No specific precautions necessary.		
Respiratory protection	No specific precautions necessary.		

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SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Solid.
Color	Various.
Odor	Odorless.
Odor threshold	Not applicable.
рН	Not applicable.
Melting point	Not applicable.
Boiling point	Not applicable.
Flash point	Not applicable.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable.
Lower and upper explosive (flammable) limits	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	Not applicable.
Solubility in water	Insoluble.
Partition coefficient: n-octanol/water	Not applicable.
Auto-ignition temperature	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No specific test data related to reactivity available for this product or its ingredients.		
Chemical stability	The product is stable.		
Possibility of hazardous reactions	Hazardous reactions will not occur.		
Conditions to avoid	Keep away from open flames, hot surfaces and sources of ignition. Do not puncture, crush or incinerate.		
Incompatible materials	No materials to be especially mentioned.		
Hazardous decomposition products	In case of open cells, there is the possibility of hydrofluoric acid and carbon monoxide release.		
Additional information No decomposition if stored and applied as directed.			

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SECTION 11: TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute toxicity	There is no data available.
Irritation/Corrosion	There is no data available.
Sensitization	There is no data available.
Mutagenicity	There is no data available.
Carcinogenicity	There is no data available.
Reproductive toxicity	There is no data available.
Teratogenicity	There is no data available.
Specific target organ toxicity (single exposure)	There is no data available.
Specific target organ toxicity (repeated exposure)	There is no data available.
Aspiration hazard	There is no data available.

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

Potential acute health effects

Eye contact	No known significant effects or critical hazards.		
Inhalation	No known significant effects or critical hazards.		
Skin contact	No known significant effects or critical hazards.		
Ingestion	No known significant effects or critical hazards.		

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	No known significant effects or critical hazards.	
Inhalation	No known significant effects or critical hazards.	
Skin contact	No known significant effects or critical hazards.	
Ingestion	No known significant effects or critical hazards.	

Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure

Potential immediate effects	No known significant effects or critical hazards.
Potential delayed effects	No known significant effects or critical hazards.

Long term exposure

Potential immediate effects	No known significant effects or critical hazards.
Potential delayed effects	No known significant effects or critical hazards.

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Potential chronic health effects

General	No known significant effects or critical hazards.		
Carcinogenicity	No known significant effects or critical hazards.		
Mutagenicity	No known significant effects or critical hazards.		
Teratogenicity	No known significant effects or critical hazards.		
Developmental effects	No known significant effects or critical hazards.		
Fertility effects	No known significant effects or critical hazards.		

Numerical measures of toxicity

Acute toxicity estimates: There is no data available.

SECTION 12: ECOLOGICAL INFORMATION

Toxicity	There is no data available.
Persistence and degradability	There is no data available.
Bioaccumulative potential	There is no data available.

Mobility in soil

Soil/water partition coefficient (Koc)	No data available.
Other adverse effects	No known significant effects or critical hazards.

Further information

Ecological injuries are not known or expected under normal use. Do not flush into surface water or sanitary sewer system.

SECTION 13: DISPOSAL CONSIDERATIONS

Advice on disposal

For recycling consult manufacturer.

Contaminated packaging

Dispose in accordance with local regulations.

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SECTION 14: TRANSPORT INFORMATION

	DOT	TDG	IMDG	IATA
UN number	UN3481	UN3481	UN3481	UN3481
UN proper shipping name	LITHIUM ION BATTERIES PACKED WITH EQUIPMENT	LITHIUM ION BATTERIES PACKED WITH EQUIPMENT	LITHIUM ION BATTERIES PACKED WITH EQUIPMENT	LITHIUM ION BATTERIES PACKED WITH EQUIPMENT
Hazard Class	Class 9	Class 9	Class 9	Class 9
Packing Instruction & Label	PI966 Section II UN 3481	PI966 Section II UN 3481	PI966 Section II UN 3481	PI966 Section II
Additional information	Lithium Ion Batteries are Less than 100 Watt Hours (Wh) Note that the lithium ion battery packed with the product is in full compliance with Section II of PI 966 and can be shipped in any quantity by road or sea; and at a per package "lithium battery weight limit" of less than 5 kg per package via Air (battery weight only; limit of 5 kg per package excluding the weight of the equipment). Net weight of lithium battery per piece of equipment (per box) SCL500RM(I)1UC = 0.56 kg SCL500RM(I)1NC = 0.56 kg SCL500RM(I)1UNC = 0.56 kg SCL400RMJ1U = 0.67 kg At less than 100 Wh per battery, packed with equipment, these are not fully regulated class 9 batteries and shall not bear a Class 9 hazard class label on the package. A Shipper's Declaration of Dangerous Goods is not required and not to be used via Air, Ocean or Road.			

North American Emergency Response Guide (ERG) 147

Note: Original packaging is strong rigid outer packaging equivalent to its capacity and intended use. As a lithium ion battery packed with equipment, the unit is not subject to State of Charge Restrictions (SOC). The UN38.3 Test Report on the pack elements are available upon request.

Special precautions for user	Not available.
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not available.

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SECTION 15: REGULATORY INFORMATION

U.S. Federal regulations	TSCA 8(a) CDR Exempt/Partial exemption: All chemical components are listed or exempt from listing United States inventory (TSCA 8b): All components are listed or exempted.
Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)	Not listed.
Clean Air Act Section 602 Class I Substances	Not listed.
Clean Air Act Section 602 Class II Substances	Not listed.
DEA List I Chemicals (Precursor Chemicals)	Not listed.
DEA List II Chemicals (Precursor Chemicals)	Not listed.

SARA 302/304

Composition/information on ingredients:

No products were found. SARA 304 RQ: N/A.

SARA 311/312

Classification: Not applicable.

Composition/information on ingredients. No products were found.

SARA 311/312

No products were found.

SARA 313

This product contains no toxic chemicals subject to the supplier notification requirements of Section 313.

State regulations

Massachusetts	Not known
New York	Not known
New Jersey	Not known
Pennsylvania	Not known
California	Proposition 65 - No known Proposition 65 substances requiring warning

Canada - Canadian lists

Canadian NPRI	Not known
CEPA Toxic substances	Not known
Canada inventory	Not known.

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SECTION 16: OTHER INFORMATION

Original release date: November 1, 2018

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Further Information USA

Data of sections 4 to 8, as well as 10 to 12, do not necessarily refer to the use and the regular handling of the product (in this sense consult package leaflet and expert information), but to release of major amounts in case of accidents and irregularities. The information describes exclusively the safety requirements for the product (s) and is based on the present level of our knowledge. This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.

The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.

Notice to reader:

Schneider Electric has prepared this Product Safety Datasheets to provide information on the referenced battery systems. Batteries are defined as articles under the GHS and exempt from GHS classification criteria (Section 1.3.2.1.1 of the GHS). To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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