


SECTION 1: IDENTIFICATION

Product identifier:

Product name:	RECHARGEABLE LI-ION BATTERY PACK
Other names:	LI-ION BATTERY/LI-ION ACCUMULATOR PACK, 585 – 625 Wh capacity battery pack
Model Numbers:	XBP48RM1U-LI, XBP48RM1U2-LI
Country:	USA/Canada
Product type:	Solid
Picture	

Identified uses

External lithium-Ion battery pack for use with APC by Schneider Electric Uninterruptible Power Supplies, specifically the Smart-UPS Online Product range and other designated compatible Uninterruptible Power Supplies (see list of applicable products in SECTION 16 : OTHER INFORMATION).

Manufacturer

Supplier/Manufacturer:	Schneider Electric IT USA (formerly APC by Schneider Electric, APC Sales and Service Corp.)
Address:	70 Mechanic St Foxboro, MA 02035 United States
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

SECTION 2: HAZARDS IDENTIFICATION

OSHA/HCS status:

This material is not considered hazardous by the OSHA Hazard Communication Standard 29 CFR 1910.1200 as amended by the Globally Harmonized System of Classification and Labeling (GHS).

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

3.1 Substance/Mixture: Mixture.

Part	Product/ingredient name	Identifiers	%
Cathode (positive electrode)	Lithium Metal Composite (Li(Ni,Mn,Co)O ₂)	Mixture	20-50
Anode (negative electrode)	Carbon, as Graphite	CAS: 7440-44-0	10-30
Electrolyte (proprietary)	LiPF ₆ salt + EC solvent	Mixture	12-17
	Polyvinylidene Fluoride (PVDF)	CAS: 24937-79-9	<5
	Aluminum Metal	CAS: 7429-90-5	2-10

	Copper Metal	CAS: 7440-50-8	2-10
Housing/Electronics	Steel Alloy/Plastic and Metal Parts	Mixture	

Further Information

For information purposes: Because of the cell structure the dangerous ingredients will not be available if used properly.

Hazardous Material Content per Directive 2006/66/EC on batteries and accumulators

Mercury content: Hg < 0.1 mg/kg

Cadmium content: Cd < 1 mg/kg

Lead content: Pb < 10 mg/kg

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.

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

Pick up and send for disposal. Note that the battery pack may contain a charge a

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

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. Protect 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 engineering controls	No specific precautions necessary.
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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical state	Solid.
Color	Various.
Odor	If leaking. Smells of medical ether.
Odor threshold	Not applicable.
pH	Not applicable.
Melting point	Not applicable.
Boiling point	Not applicable.
Flash point	Not applicable unless individual components exposed
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not applicable unless individual components exposed
Lower and upper explosive (flammable) limits	Not applicable.
Vapor pressure	Not applicable.
Vapor density	Not applicable.
Relative density	Not applicable unless individual components exposed
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	The product is non-reactive under normal conditions of use, storage and transport.
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.

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.

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 (K_{oc})	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

Disposal in accordance with local regulations.

SECTION 14: TRANSPORT INFORMATION

Lithium-ion battery packs are regulated as Class 9 Miscellaneous Dangerous Goods (also known as “hazardous materials” in the United States) pursuant to the International Civil Aviation Organization (ICAO) Technical Instructions for the Safe Transport of Dangerous Goods by Air, International Air Transport Association (IATA) Dangerous Goods Regulations, the International Maritime Dangerous Goods (IMDG) Code, European Agreements concerning the International Carriage of Dangerous Goods by Rail (RID) and Road (ADR), and applicable national regulations such as the USA’s hazardous materials regulations (see 49 CFR 173.185). These regulations contain very specific packaging, labeling, marking, and documentation requirements. The regulations also require that individuals involved in the preparation of dangerous goods for transport be trained and certified on proper package preparation, labeling, marking and preparing shipping documents. The following provides information to these trained and certified individuals to support their proper shipping of this battery pack.

The following provides information to trained and certified individuals to support proper shipping of this item.

Battery Pack	Nominal Voltage (DCV)	Nominal Capacity (mAh)	Power (Wh)	Weight
--------------	-----------------------	------------------------	------------	--------





LI-ION BATTERY PACK (XBP48RM1U-LI, XBP48RM1U2-LI)

Version: 18

Date: August 3, 2022

XBP48RM1U-LI	50	12000	604.8	13.2 kg (3.780 kg is the lithium battery weight)
XBP48RM1U2-LI	50	12000	604.8	12 kg (3.780 kg is the lithium battery weight)

- The battery pack meets the requirements of the test in the United Nations (UN) Manual of Tests and Criteria, Part III, subsection 38.3. UN38.3 Test Report Summary is available upon request.
- Original packaging is strong rigid outer packaging appropriate to its capacity and intended use. The packaging is UN specification.
- The International Air Transport Association (IATA) Dangerous Goods Regulations (64th DGR Manual of IATA Edition 2023, Special Provisions A88、A99、A154、A164、A183、A201、A206、A213、A331、A334 & A802 for UN3480 Lithium Ion Battery & Packing Instruction 965, Section IA is applied.)
- Lithium-ion batteries transport by air in accordance with PI965 at a state of charge (SOC) not to exceed 30 percent of rated design capacity.
- The International Maritime Dangerous Goods (IMDG) Code (Edition 2020, Special Provision、230、348、384 , Packing Instruction P903 is applied.)
- The battery pack must not be packed in the same outer packaging, or placed in an overpack with, dangerous goods classified in Class 1 (except 1.4S), Division 2.1 (flammable gases), Class 3 (flammable liquids), Division 4.1 (flammable solids) and Division 5.1 (oxidizers).

	U.S. DOT	TDG	IMDG	IATA
UN number	UN3480	UN3480	UN3480	UN3480
UN proper shipping name	LITHIUM ION BATTERIES	LITHIUM ION BATTERIES	LITHIUM ION BATTERIES	LITHIUM ION BATTERIES
Transport hazard class(es)	9 	9 	9 	9 
Environmental hazards	None	None	None	None
Additional information	HAZMAT Bill of Lading (BOL) required via ground or rail; Dangerous Goods Declaration via air or sea. Provide emergency response information by including this Safety Data Sheet.	Declaration of Dangerous Goods (DGD) is required.	Declaration of Dangerous Goods (DGD) is required.	Declaration of Dangerous Goods (DGD) is required. State of Charge (SoC) of the battery or cell must not exceed 30%. Maximum 35 kg (battery weight) net quantity per package. Statement on the

	If shipped via ground in the USA, an acceptable alternative is to write "ERG 147" on the Bill of Lading.		(air)waybill – "Dangerous Goods as per Attached DGD" or "Dangerous Goods as per attached Shipper's Declaration" and "Cargo Aircraft Only" or CAO
--	--	--	--

ERG : 147

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

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 available.
Clean Air Act Section 602 Class I Substances	Not available.
Clean Air Act Section 602 Class II Substances	Not available.
DEA List I Chemicals (Precursor Chemicals)	Not available.
DEA List II Chemicals (Precursor Chemicals)	Not available.

SARA 302/304

Composition/information on ingredients
Not available. SARA 304 RQ: Not available.

SARA 311/312

Classification: Not applicable.
Composition/information on ingredients. No products were found.

SARA 311/312

Not applicable

SARA 313

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

State regulations

Massachusetts	Not known
---------------	-----------

LI-ION BATTERY PACK (XBP48RM1U-LI, XBP48RM1U2-LI)

Version: 18

Date: August 3, 2022

New York	Not known
New Jersey	Not known
Pennsylvania	Not known

California Prop. 65

No known California Proposition 65 material that require WARNING language.

Canada - Canadian lists

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

SECTION 16: OTHER INFORMATION

Initial Review: March 25, 2017

Review date: August 3, 2022

Version: 1.8

Each product listed product consists of two separately boxed items – the uninterruptible power supply (UPS) that does not contain a battery and an external battery pack (XBP) that is the portion of the product subject to this requirement. The XBP48RM1U-LI and XBP48RM1U2-LI are substantially equivalent. List of products covered by this Safety Data Sheet :

Model Number	Description
SRTL1000RMXLI	UPS: SRT1000UXI-LI (contains no battery) XBP: XBP48RM1U-LI
SRTL1000RMXLI-NC	UPS: SRT1000UXI-NCLI (contains no battery) XBP: XBP48RM1U-LI
SRTL1500RMXLI	UPS: SRT1500UXI-LI (contains no battery) XBP: XBP48RM1U-LI
SRTL1500RMXLI-NC	UPS: SRT1500UXI-NCLI (contains no battery) XBP: XBP48RM1U-LI
SRTL2200RMXLI	UPS: SRT2200UXI-LI (contains no battery) XBP: XBP48RM1U2-LI
SRTL2200RMXLI-NC	UPS: SRT2200UXI-NCLI (contains no battery) XBP: XBP48RM1U2-LI
SRTL3000RMXLI	UPS: SRT3000UXI-LI (contains no battery) XBP: XBP48RM1U2-LI
SRTL3000RMXLI-NC	UPS: SRT3000UXI-NCLI (contains no battery) XBP: XBP48RM1U2-LI

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.