

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 and XBP48RM1U2-LI
Country:	EU
Product type:	Solid
Picture	

Identified uses.

External lithium-ion battery pack for use with APC by Schneider Electric Uninterruptible Power Supplies, specifically the SRTL1000RMXLI, SRTL1500RMXLI, SRTL1000RMXLI-NC, SRTL1500RMXLI-NC and other designated compatible Uninterruptible Power Supplies.

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

The rechargeable Li-ion battery cells described in this Safety Data Sheet are sealed units which are not hazardous when used according to the manufacturer's recommendations. Risk of exposure only occurs if the battery cell is mechanically, thermally, or electrically abused and the enclosure is compromised.

Classification of the substance or mixture

This product is considered as a manufactured article, and not classified as hazardous according to EC 1272/2008

Label Elements

Pictograms Not applicable

Signal word Not applicable

Hazard Statement Not classified.

Precautionary statements Not classified.

Other hazards

The chemicals are contained in a sealed enclosure. Risk of exposure occurs only if the cell or pack is mechanically, thermally, electrically, or physically abused to the point of compromising the enclosure. If this occurs, exposure to the electrolyte solution contained within can occur by inhalation, ingestion, eye contact and skin contact.

Contains no PBT/vPvB substances $\geq 0.1\%$ assessed in accordance with REACH Annex XIII

The mixture does not contain substance(s) included in the list established in accordance with Article 59(1) of REACH for having endocrine disrupting properties, or is not identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture.

Ingredient Name	Product Identifier	%.	Classification according to CLP 1272/2008
Lithium Iron Phosphate (LiFePO ₄)	CAS: 15365-14-7 EC number: 604-917-2	28	Not classified
Poly (vinylidene fluoride)	CAS: 24937-79-9 EC number: 607-458-6	1.1	Not classified
Sodium Carboxymethyl Cellulose	CAS: 9000-11-7 EC number 618-326-2	0.21	Not classified
Styrene Butadiene Rubber	CAS: 9003-55-8 EC number: 685-145-3	0.39	Not classified
Graphite	CAS: 1333-86-4 EC number 215-609-9	15.5	Not classified
Polypropylene	CAS: 9003-07-0 EC number 604-917-2	2.8	Not classified

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Lithium Hexafluorophosphate (LiPF6)	CAS: 21324-40-3 EC number: 244-334-7	1.7	Acute Tox. 3 Skin Corr. 1A Eye Dam. 1 STOT RE 1
(DMC) Dimethyl Carbonated	CAS: 616-38-6 EC number 244-334-7	3.1	Flammable liquids, Category 2
(EMC) Methyl-Ethyl Carbonate	CAS: 623-53-0 EC number 433-480-9	6.2	Flammable liquids, Category 2
(EC) Ethylene Carbonate	CAS: 96-46-1	2.6	Not classified
Copper Foil	CAS: 7440-50-8	10.0	Not classified
Aluminum Foil	CAS: 7429-90-5	4.4	Not classified
Iron	CAS: 7439-89-6	24	Not classified

CAS number/other identifiers

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 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). 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

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).

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.
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Unsuitable extinguishing media	None known.
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SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

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).

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

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product.

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

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.

Occupational exposure limits

No exposure limit value known

Recommended monitoring procedures	<p>If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.</p>
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DNELs/DMELs

No DNELs/DMELs available.

PNECs

No PNECs available.

8.2 Exposure controls

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

9.1 Information on basic 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.

9.2 Other information

No additional information.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
10.2 Chemical stability	The product is stable.

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10.3 Possibility of hazardous reactions	Hazardous reactions will not occur.
10.4 Conditions to avoid	Keep away from open flames, hot surfaces and sources of ignition. Do not puncture, crush or incinerate.
10.5 Incompatible materials	No materials to be especially mentioned.
10.6 Hazardous decomposition products	In case of open cells, there is the possibility of hydrofluoric acid and carbon monoxide release.
10.7 Additional information	No decomposition if stored and applied as directed.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity	There is no data available.
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Acute toxicity estimates

ROUTE: ORAL	ATE value: 45454.5 mg/kg
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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.

Other information

Not available.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity	There is no data available.
12.2 Persistence and degradability	There is no data available.
12.3 Bio accumulative potential	There is no data available.

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc})	No data available.
Other adverse effects	No known significant effects or critical hazards.

12.5 Results of PBT and vPvB assessment

PBT	Not applicable
vPvB	Not applicable.

12.6 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

The information in this section contains generic advice and guidance. Consult local recycling or disposal service providers for further information.

13.1 Advice on disposal

Product

Methods of disposal	The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.
Hazardous waste	This product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

Packaging

Methods of disposal	The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.
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SECTION 14: TRANSPORT INFORMATION

Lithium-ion battery packs are regulated as Class 9 Miscellaneous Dangerous Goods 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. 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	Nominal Capacity (mAh)	Power (Wh)	Weight
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	(DCV)			
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).

	ADR/US 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	9	9	9	9
Transport hazard Label				
Environmental Hazards	None	None	None	None
Additional information	HAZMAT Bill of Lading (BOL) required via ground or rail, Dangerous Goods	Declaration of Dangerous Goods (DGD) is required.	Declaration of Dangerous Goods (DGD) is required.	Declaration of Dangerous Goods (DGD) is required. Packing Instruction 903

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	<p>Declaration via air or sea. Provide emergency response information by including this Safety Data Sheet.</p> <p>If shipped via ground in the USA, an acceptable alternative is to write "ERG 147" on the Bill of Lading.</p>			<p>State of Charge (SoC) of the battery must not exceed 30%.</p> <p>Maximum 35 kg (battery weight) net quantity per package (battery weight only; excluding weight of packaging/equipment).</p> <p>Statement on the Air waybill: "Dangerous Goods as per Attached DGD" or "Dangerous Goods as per attached Shipper's Declaration" and « Cargo Aircraft Only » or « CAO »</p>
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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

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

EU Regulation (EC) No. 1907/2006 (REACH)
Annex XIV – List of substances subject to authorization

Annex XIV	None of the components are listed.
Substances of very high concern	None of the components are listed.

Annex XVII – Restrictions on the manufacture placing on the market and use of certain dangerous substances, mixtures and articles

Annex XVII	Not applicable.
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Other EU regulations

Europe inventory	At least one component is not listed in EINECS, but all such components are listed in ELINCS.
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Seveso Directive	is product is not controlled under the Seveso Directive
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15.2 Chemical Safety Assessment

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

SECTION 16: OTHER INFORMATION

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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

Abbreviations and acronyms:

ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DMEL = Derived Minimal Effect Level
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number
 vPvB = Very Persistent and Very Bioaccumulative

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NOTE REGARDING BATTERY PACK RATING: This product can be built using different lithium-ion battery cells that result in different battery pack ratings (as measured in watt-hours (WH)). This data sheet is intended to address all versions of the product.

Notice to reader:

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.