LITHIUM-ION EXTERNAL BATTERY PACK (XBP48RM2U-LI)
PRODUCT SAFETY DATA SHEET
Version: 1.1
Date: March 21, 2025

SECTION 1: IDENTIFICATION

1.1 Product identifier:

Product name:	Lithium-Ion External Battery Pack
Other names:	APC Smart-UPS Online 48V 2U
Model Numbers:	XBP48RM2U-LI
Country:	USA/Canada
Product type:	Battery pack is a manufactured article consisting of a plastic and metal sealed case containing electronics and cylindrical lithium-ion battery/cells. Solid.
Picture	

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

Relevant identified use(s): Electric Storage Battery
Use(s) advised against: None Known

1.3 Details of the supplier of the safety data sheet

Supplier/Manufacturer:	Schneider Electric IT USA, Schneider Electric IT Corp., (formerly APC by Schneider Electric, APC Sales and Service Corp.)
Address:	SEIT US - 70 Mechanic Street, Foxboro, MA US
Telephone:	+1 800-788-2208 or +1 401-789-5735
E-mail:	http: //nam-en.apc.com/app/ask
Site web:	www.apc.com

Emergency telephone number (with hours of operation)

For all Service, Technical Support and Emergency Inquires.
+1-813-248-0585 CHEMTEL MIS0002494

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification Categories/OSHA Status/HCS

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

2.1 Classification of the substance or mixture

Not applicable under normal use in accordance with United Nations Conference on Environment and Development (UNCED) and Occupational Safety & Health Administration (OSHA) 29 CFR 1910.1200

2.2 Label elements

Signal Word: NONE

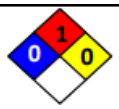
Not applicable under normal use in accordance with Environment and Development (UNCED) and Occupational Safety & Health Administration (OSHA) 29 CFR 1910.1200.

Hazard Statements: NONE

Not applicable under normal use in accordance with United Nations Conference on Environment and Development (UNCED) and Occupational Safety & Health Administration (OSHA) 29 CFR 1910.1200.

Precautionary Statements

P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat/sparks/open flames/hot surfaces – No smoking.
P370	In case of fire: Use carbon dioxide, dry chemical or water extinguisher.
P402	Store in a dry place
P410	Protect from sunlight.
P501	Dispose of batteries in accordance with applicable hazardous waste regulations.

Protective Clothing	NFPA Rating	EC classification	WHMIS (Canada)	Transportation	GHS Hazard Symbol
Not Applicable with normal use		Not classified as hazardous	Not Applicable with normal use	See Section 14	Not Applicable with normal use

2.3 Other hazards

Exposure to contents of an open or damaged cell or battery: contact with this material will cause burns to the skin, eyes and mucous membranes. May cause sensitization by skin contact.

2.4 Other information

The product is a Lithium-ion battery and is therefore classified as an article and is not hazardous when used according to the recommendations of the manufacturer. The hazard is associated with the contents of the battery. Under recommended use conditions, the electrode materials and liquid electrolyte are non- reactive provided that the battery integrity remains, and the seals remain intact. The potential for exposure should not exist unless the cell in the battery leaks, is exposed to high temperatures or is mechanically, electrically or physically abused/damaged. If the cell in the battery is compromised and starts to leak, based upon the battery ingredients, the contents are classified as Hazardous.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance/Mixture: Mixture.

Product/ingredient name	Identifiers (CAS)	%
Lithium Iron Phosphate	15365-14-7	28
Poly (vinylidene fluoride)	24937-79-9	1.1
Sodium Carboxymethyl Cellulose	9000-11-7	0.21
Styrene Butadiene Rubber	9003-55-8	0.39
Graphite	1333-86-4	15.5
Polypropylene	9003-07-0	2.8
Lithium Hexafluorophosphate	21324-40-3	1.7
（DMC） Dimethyl Carbonated	616-38-6	3.1
Methyl-Ethyl Carbonate	623-53-0	6.2
Ethylene Carbonate	96-46-1	2.6
Copper Foil	7440-50-8	10.0
Aluminum Foil	7429-90-5	4.4
Iron	7439-89-6	24

Lead	7439-92-1	Not Detected
Cadmium	7440-43-9	Not Detected
Mercury	7439-97-6	Not Detected

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General information

The following first aid measures are required only in case of exposure to interior battery components after damage of the external battery and cell casings. Undamaged, closed cells do not represent a danger to the health.

Eye contact	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.
Inhalation	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 victimis not breathing. Do not use mouth-to-mouth if victim inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with one-way valve or another proper respiratory medical device.
Skin contact	IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing andwash before reuse. If signs/symptoms develop, get medical attention.
Ingestion	Induce vomiting. Get medical attention immediately.

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

Refer to Section 11 - Toxicological Information

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

See section: Description of first aid measures.

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

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media	Use CO2 or CLASS D fire extinguisher.

5.2 Special hazards arising from the substance or mixture.

Unusual Fire and Explosion Hazards	At temperatures over 120°C (248°F) batteries may vent, ignite and produce sparks. May burn rapidly with flare-burning effects. May ignite other batteries in close proximity.
Hazardous Combustion Products	The interaction of water vapor and exposed lithium hexafluorophosphate (LiPF6) may result in the generation of hydrogen and hydrogen fluoride (HF) gas. Contact with battery electrolyte may be irritating to skin, eyes and mucous membranes. Thermal degradation may produce hazardous fumes of lithium, cobalt and manganese, hydrofluoric acid, hydrogen andoxides of carbon, aluminum, lithium, copper and cobalt as well and smoke and irritating, corrosive and/or toxic gases. Fumes may cause dizziness or suffocation.

5.3 Special advice for firefighters

In case of fire where lithium-ion cells and batteries are present, flood the area with water. If any cells or batteries are burning, water may not extinguish them, but will cool the adjacent cells or batteries and control the spread of fire.
Carbon Dioxide, dry chemical and foam extinguishers may be preferred for small fires, but also may not extinguish burning lithium-ion cells or batteries. Burning cells or batteries will burn themselves out. Virtually all fires involving lithium-ion cells and batteries can be controlled with water. When water is used, however, hydrogen gas may be evolved which can form an explosive mixture with air. LITH-X (powdered graphite) or copper powder fire extinguishers, sand, dry ground dolomite or soda ash may also be used. These materials act as smothering agents.

5.4 Protective equipment and precaution for firefighters

In case of fire and the release of hydrogen fluoride, it is critical to protect the skin from any contact. Firefighters should wear a self-contained breathing apparatus. Burning lithium-ion cells and batteries can produce toxic fumes including hydrogen fluoride (HF), oxides of carbon, aluminum, lithium, copper and cobalt. Volatile phosphorous Penta fluoride may form at temperatures above 110°C (230°F).
Wear adequate personal protective equipment as indicated in Section 8.

SECTION 6: ACCIDENTAL RELEASE MEASURES

The information in this section contains generic advice and guidance. Battery material is enclosed in casing and does not release easily under normal usage.

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergencypersonnel	Do not walk-through spilled material. Wear appropriate personal protective equipment, avoid direct contact.
For emergencyresponders	Do not walk-through spilled material. Wear appropriate personal protective equipment, avoid direct contact. Keep unauthorized personnel away. Wear adequate personal protective equipment as indicated in Section 8.

6.2 Environmental precautions

Environmentalprecautions	Do not discharge into the drains/surface waters/groundwater.

6.3 Methods and materials for containment and cleaning up

Spill	Spills may be absorbed on non-reactive absorbents such as Vermiculite. Place cellsinto individual plastic bags and then place into appropriate containers and close tightly for disposal. Ensure that cleanup procedures do not expose spilled materialto any moisture. Immediately transport closed containers outside. Lined steel drums are suitable for storage of damaged cells until proper disposalcan be arranged.

SECTION 7: HANDLING AND STORAGE

7.1 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.
Bio accumulative 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

	DOT / TDG / SCT	IMDG	IATA / ICAO
UN number	UN3480	UN3480	UN3480
UN proper shipping name	LITHIUM ION BATTERIES	LITHIUM ION BATTERIES	LITHIUM ION BATTERIES
Transport hazard Label			 
Environmental Hazards	None	None	None
Additional information	HAZMAT Shipping papers are required. Provide emergency response information by noting ERG 147 on the shipping papers and 24 hour emergency telephone and contract number.	IMO Declaration is required.	IATA Shipper's Declaration of Dangerous Goods (DGD) is required. Ensure State of charge (SOC) does not exceed 30% of rated design capacity Maximum 35 kg (battery weight) net quantity per package (battery weight only; excluding weight of packaging/ equipment). 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'.

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

Product	Power (Wh)	Weight
XBP48RM2U-LI	2400	26.370 kg (16.8 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.
- Batteries must be packed in strong rigid outer packaging for transportation. UN Spec packaging required.
- The International Air Transport Association (IATA) Dangerous Goods Regulations Packing Instruction 965 IA applies.
- AIR Only: Ensure State of charge (SOC) does not exceed 30% of rated design capacity.
- Do not pack or 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).

SECTION 15: REGULATORY INFORMATION

U.S. Federal regulations	• TSCA Status: Complies. • OSHA: Manufactured article exempt from 29 CFR 1910.1200 • SARA EPA Title III: None. • Sec. 302/304: None. • Sec. 311/312: None. • Sec. 313: None. • CERCLA RQ: None .
Canada Lists	**Canadian NPRI** None **CEPA Toxic substances** None **Canada inventory** None
EU Classification for the Substance/Preparation	• These products are not classified as hazardous according to Regulation (EC) No. 1272/2008. Keep out of the reach of children.
	• Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I as amended: Not listed. • Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1 as amended: Not listed. • Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2 as amended: Not listed. • Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3 as amended: Not listed. • Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V as amended: Not listed. • Regulation (EC) No. 166/2006, REACH Article 59(10) Candidate List as currently published by ECHA: Not listed.
EU Authorizations:	• Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to

	authorization, as amended: Not listed.
EU Restrictions on use:	• Regulation (EC) No. 1907/2006, REACH Annex XVII Directive 2004/37/EC: on the safety and health of pregnant workers and workers who have recently given birth or are breastfeeding: Not listed
Other EU Regulations	• Directive 96/82/EC (Seveso II) on the control of major accident hazards involving dangerous substances: Not listed. • Directive 94/33/EC on the protection of young people at work: Not listed. This Safety Data Sheet complies with the requirements of Regulation (EC) No. 1907/2006.
Chinese Regulations:	• General Rule for Classification and Hazard Communication of Chemicals (GB 13690-2009): Specifies the classification, labelling and hazard communication of chemicals in compliance with the GHS standard for chemical production sites and labelling of consumer goods. • General Rule for Preparation of Precautionary Labels for Chemicals (GB 15258-2009): Specifies the relevant application methods of precautionary labels for chemicals. Safety Data Sheet for Chemical Products Content and Order of Sections (GB/T 16483-2008) • (GB/T 17519-2013) Guidance on the compilation of safety data sheet for chemical products.

SECTION 16: OTHER INFORMATION

This safety data sheet is only effective for external battery pack XBP48RM2U-LI, provided by commissioner Schneider Electric IT Corporation, which is manufactured by Schneider Electric IT USA, Schneider Electric IT Corp. The commissioner provides the composition information of batteries and promises its integrity and accuracy. Users should read this file carefully and use the batteries in correct method. Schneider Electric doesn't assume responsibility for any damage or loss because of misuse of batteries and UPS'

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.