

Thornhill Medical's Dangerous Goods (DG) Battery Shipping Guide

MOVES® SLC™

Q: What are the acceptable formats for transporting MOVES SLC batteries?

A: The MOVES SLC System includes two batteries per system. Each battery is 1.25Kg, 130mm x 65mm x 130mm and can be shipped 1) installed in the system 2) placed in the accessory case or 3) alone without the system or the accessory case.



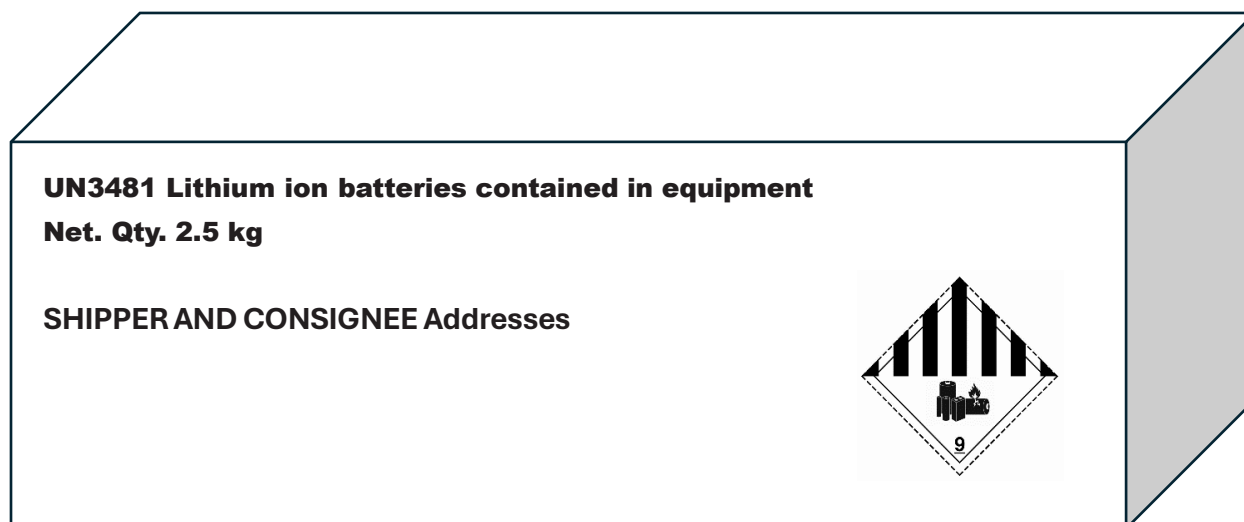
Left: MOVES SLC Accessory Case, Center: MOVES SLC System with Pelican Case, Right: MOVES SLC Batteries/label

1) Shipping batteries installed in the MOVES SLC System – Recommended method

MOVES SLC batteries installed in the system fall under **UN3481**, Class 9, **Lithium ion batteries contained in equipment**. PI967.

NOTE: consult all carrier variations as some may restrict this UN#

Requirements for shipping batteries installed in the MOVES SLC system UN3481	
Documentation	Must be accompanied by a DGD (dangerous goods declaration) View template, dangerous goods declaration . Shipper and consignee addresses UN3481 Lithium ion batteries contained in equipment. Class 9 No Packing Group Quantity and type of packaging format – number of identical packages, type and net quantity per. Example. 1 Plastic Box x 2.5 kg
Packaging	The current MOVES SLC black pelican case meets shipping requirements. Batteries must be at 30% SOC (state of charge) or less. The battery charge status button will confirm SOC. No more than 2 LED lights should be illuminated.
Labeling	Class 9 Battery Label <download here> affixed to the System case Shipper and consignee addresses UN3481 Lithium ion batteries contained in equipment Net quantity (if more than 1 non-identical packages is shipped)

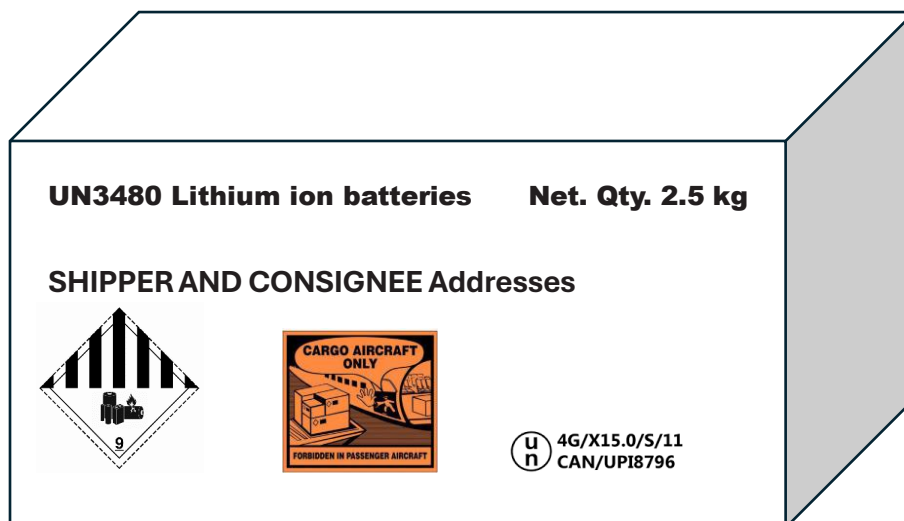


2) **Shipping batteries in the MOVES SLC accessory case or 3) on their own**

MOVES SLC batteries in the accessory case or on their own fall under **UN3480**, Class 9, **Lithium ion batteries**. PI965.

NOTE: consult all carrier variations as some may restrict this UN#

Requirements for shipping batteries in the accessory case or on their own UN3480	
Documentation	<p>Must be accompanied by a DGD (dangerous goods declaration) View template, dangerous goods declaration.</p> <p>Shipper and consignee addresses</p> <p>UN3480</p> <p>Lithium ion batteries</p> <p>Class 9</p> <p>No Packing Group</p> <p>Quantity and type of packaging format – number of identical packages, type and net quantity per. Example. 1 Plastic Box x 2.5 kg</p>
Packaging	<p>Batteries must be at 30% SOC (state of charge) or less. The battery charge status button will confirm SOC. No more than 2 LED lights should be illuminated.</p> <p>When shipped on their own, MOVES SLC batteries must be enclosed in inner packaging that prevents contact with other batteries and short circuits, using non-conductive material.</p> <p>UN Spec packaging is required.</p>
Labeling	<p>Class 9 Battery Label <download here></p> <p>CAO label <download here></p> <p>Shipper and consignee addresses</p> <p>UN3480</p> <p>Lithium ion batteries</p> <p>Net quantity (if more than 1 non-identical packages is shipped)</p>



Q: What are the shipping methods for MOVES SLC with installed batteries (UN3481), MOVES SLC batteries in accessory case (UN3480) or packaged alone?

A: MOVES SLC with batteries, MOVES SLC batteries outside of system can be shipped by air or ground. Depending on the battery classification certain restrictions apply.

Air shipments

- Many airlines have variations whereby they only accept specific UN#'s and battery configurations.
- Only **UN3481** (MOVES® SLC™ batteries in the system), would be allowed to ship PAX (passenger aircraft). PAX limit is 5 kg net weight of batteries per package.
 - Note: CAO may also be the only option for UN3481 depending on carrier variations.
- The only option for **UN3480** (MOVES® SLC™ batteries in Accessory Case or on their own) is CAO (cargo aircraft only). The limit is 35 kg net weight of batteries per package.
 - Must fly CAO (cargo aircraft only). Forbidden for (PAX) (passenger aircraft.)

Airplane Carry-on or checked luggage.

- MOVES® SLC™ batteries exceed passenger baggage limits
- MOVES® SLC™ System with batteries exceed passenger baggage limits

Ground shipments

- Refer to the packaging requirements for **UN3481** and **UN3480** in the above sections.

Q: Are there any differences in shipping destinations for batteries?

A: There are no differences in shipping destinations for batteries between Canada to USA, US to USA, US to Canada, Canada to ROW, and USA to ROW.

However, based on 49 CFR 173.185, the MOVES SLC system may be shipped by ground in accordance with the DG regulations as USA has an exemption for lithium ion batteries under 300Wh. **This is a USA ground only exemption and cannot be used when shipping to any other country.** The following completed label with corresponding UN# must be on each package. UN Spec packaging not required. Packaging must be strong and rigid.

MOVES SLC System - UN3481.

MOVES SLC Accessory Case – UN3480



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MADM™

Q: What type of battery is included in MADM™?

A: The MADM™ Anesthesia Delivery system includes one built-in rechargeable lithium ion Battery. 3.6V, 30Wh.

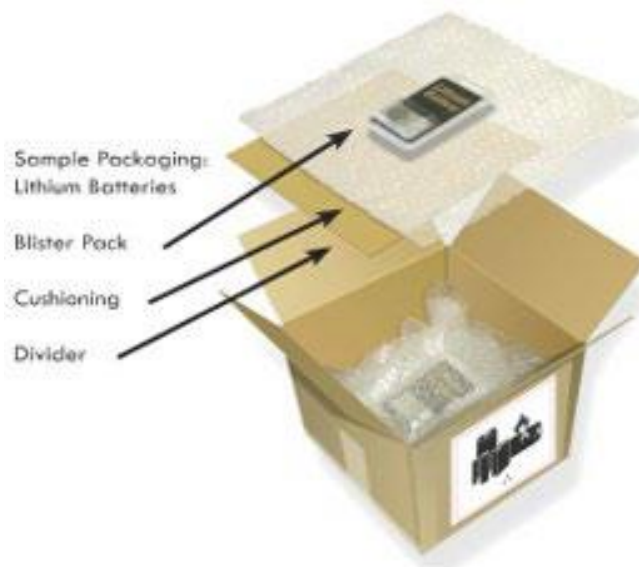


Left: MADM Pelican Case Right: MADM system

Q: What is the documentation, packaging and labeling requirements for shipping MADM?

A:

Requirements for shipping MADM™ UN3481	
Documentation	<p>All airlines will require the following on the (AWB) airway bill.</p> <p>“Lithium ion batteries in compliance with section II of PI967” in the Handling Information section.</p> <p>When travelling by air, a few airlines require a specific Section II battery exemption form. (Airline would provide this form)</p> <p>Shipper and consignee addresses</p> <p>Lithium ion batteries contained in equipment</p>
Packaging	The current MADM black pelican case meets shipping requirements.
Labeling	<p>Class 9 Battery Label <download here> affixed to the System case</p> <p>Shipper and consignee addresses</p> <p>UN3481</p> <p>Lithium ion batteries contained in equipment</p> <p>Net quantity (if more then 1 non-identical packages is shipped)</p>



Q: Can the MADM™ battery be removed from the system for transport?

A: No. The battery can not be removed, and therefore must ship in the MADM system.

Q: Does the MADM unit qualify for any lithium battery transport exemptions?

A: The MADM battery is under 100Wh and qualifies for the lithium ion battery exemption. The battery falls under UN3481, Class 9, Lithium ion batteries contained in equipment.

Q: What are the shipping methods for MADM?

A: MADM, can be shipped by air or ground.

Air shipments

- Many airlines have variations whereby they only accept specific UN#'s and battery configurations.
- UN3481 (MADM), would be allowed to ship PAX (passenger aircraft). PAX limit is 5 kg net weight of batteries per package.
 - Note: CAO may also be the only option for UN3481 depending on carrier variations.

Airplane Carry-on or checked luggage.

- MADM systems may be carried as carry-on or checked baggage
 - IATA allows 15 electronic devices with battery contained in equipment. However, airlines and airport security may restrict overall amount per person. An absolute limit per person is therefore unknowable.

Ground shipments

- Refer to the packaging requirements for **UN3481** in the above section.

Q: Are there any differences in shipping destinations for batteries?

A: There are no differences in shipping destinations for batteries between Canada to USA, US to USA, US to Canada, Canada to ROW, and USA to ROW.

However, based on 49 CFR 173.185, the MADM system may be shipped by ground in accordance with the DG regulations as USA and Canada have an exemption for lithium ion batteries under 100Wh. See requirements for shipping MADM above.



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