

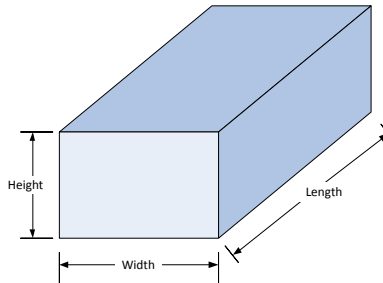


Guidance for Ordering the RecyclePak Damaged, Defective or Recalled Lithium Ion or Lithium Metal Battery Recycling Kits

Please follow the guidance in the chart below and on the following page as to the types, sizes, quantities, maximum weight, lithium content and Watt-hours of batteries allowed in the different RecyclePak® kits. **Lithium Ion (UN3480) and Lithium Metal (UN3090) batteries CANNOT be comingled in the same kit.**

TABLE 1 – PACKAGING LIMITS

To calculate the maximum battery size, compare the combined width and height as well as the length, as shown below, of the battery to the dimensions listed in Table 1 below.



Small Kit – 5.5 L Metal Can

Maximum Battery Size		Maximum total weight of batteries? DO NOT EXCEED GROSS BATTERY WEIGHT LISTED	Number of batteries to recycle?	Are your batteries Lithium Ion or Lithium Metal?	RecyclePak Kit that will best suit your needs:	
W+H	L					
2"	1.5"	Multiple Batteries: 2 kg (4.4 lbs.) Single Battery: 3 kg (6.6 lbs.)	1-15 (2.5"x3" bags in kit)	Ion (UN3480)	Supply-363LI	
				Metal (UN3090)	Supply-363LM	
3.5"	6"		1-3 (4"x8" bags in kit)	Ion (UN3480)	Supply-364LI	
				Metal (UN3090)	Supply-364LM	
4.5"	5.5"		1-2 (6"x8" bags in kit)	Ion (UN3480)	Supply-365LI	
				Metal (UN3090)	Supply-365LM	
5"	7"		Single Battery: 3 kg (6.6 lbs.)	1 (8"x10" bag in kit)	Ion (UN3480)	Supply-366LI
					Metal (UN3090)	Supply-366LM

Large Kit – 5 Gal Metal Drum

Maximum Battery Size		Maximum total weight of batteries? DO NOT EXCEED GROSS BATTERY WEIGHT LISTED	Number of batteries to recycle?	Are your batteries Lithium Ion or Lithium Metal?	RecyclePak Kit that will best suit your needs:	
W+H	L					
2"	1.5"	Multiple Batteries: 2 kg (4.4 lbs.) Single Battery: 5 kg (11 lbs.)	1-50 (2.5"x3" bags in kit)	Ion (UN3480)	Supply-367LI	
				Metal (UN3090)	Supply-367LM	
3.5"	6"		1-11 (4"x8" bags in kit)	Ion (UN3480)	Supply-368LI	
				Metal (UN3090)	Supply-368LM	
4.5"	5.5"		1-7 (6"x8" bags in kit)	Ion (UN3480)	Supply-369LI	
				Metal (UN3090)	Supply-369LM	
5"	7"		1-3 (8"x10" bags in kit)	Ion (UN3480)	Supply-370LI	
				Metal (UN3090)	Supply-370LM	
11"	9"		Single Battery: 5 kg (11 lbs.)	1 (12"x15" bag in kit)	Ion (UN3480)	Supply-371LI
					Metal (UN3090)	Supply-371LM



IMPORTANT NOTES:

- Lithium Ion and Lithium Metal batteries CANNOT be commingled. A separate kit must be purchased for each type of battery.
- Each battery needs to be contained in its own anti-static bag. Anti-static bags are provided with the kits in the sizes identified in Table 1 above. The number of bags provided equals the maximum number of batteries allowed in the kit.
- Different sizes of batteries of the same type can be placed into a kit. Be sure to order a kit containing;
 1. the appropriate number of anti-static bags to contain all of the batteries you wish to recycle
 2. anti-static bags large enough to fit the largest size of battery you wish to recycle.
- The total gross weight of the inside 5.5 L metal can for Supply-363, 364, 365, 366 (LI or LM) not to exceed 4 kg (8.8 lbs).
- The total gross weight of the inside 5 Gal metal drum for Supply-367, 368, 369, 370, 371 (LI or LM) not to exceed 9.3 kg (20.5 lbs).
- Lithium content restricted to 5 grams per cell and 25 grams per battery for Lithium Metal, as obtained from the Safety Data Sheet (SDS). (See information on the back page of this document explaining how to calculate lithium content.)
- Lithium ion cells are restricted to 60 Wh and lithium ion batteries to 300 Wh, as obtained from the Safety Data Sheet (SDS). (See information below explaining how to calculate lithium content.)

NOTE ON LITHIUM BATTERIES: The following guidance should be followed when managing spent lithium batteries in RecyclePak®.

1. For purposes of this guidance, we use the term "lithium metal battery" to refer to a non-rechargeable battery and the term "lithium ion battery" to refer to a rechargeable battery.
2. A cell is a single electro-chemical unit; a battery consists of one or more connected cells.
 - a. The size of a lithium metal cell or battery is determined by its lithium content as summarized in Table 2 below.
 - b. The size of a lithium ion cell or battery is determined by the Watt-hour (Wh) rating of the cell(s) or battery as summarized in Table 2 below.
3. Only those cells and batteries designated as "Authorized for RecyclePak®" in Table 2 below, may be shipped using this packaging. Cells and batteries designated as "Not Authorized for RecyclePak®" in Table 2 below, may not be shipped using this packaging.

TABLE 2- SMALL BATTERY AND CELL DEFINITIONS		
Small Lithium cells and batteries are defined in 49 CFR 173.185(C).		
Cells	Authorized for RecyclePak®	Not Authorized for RecyclePak®
Lithium metal	5 g Li.	> 5 g Li.
Lithium ion	60 Wh	> 60 Wh
Batteries	Authorized for RecyclePak®	Not Authorized for RecyclePak®
Lithium metal	25 g Li	> 25 g Li.
Lithium ion	300 Wh	> 300 Wh

4. Generators of Lithium batteries are responsible for proper identification of their spent lithium metal and lithium ion batteries.
 - a. Lithium metal batteries are classified by the quantity of lithium contained in the cell(s) or battery. Battery manufacturers may be able to provide guidance as to the amount of lithium contained in the cell(s) or battery.
 - b. Lithium ion batteries are classified by the Wh rating of the cell(s) or battery. Most lithium ion batteries will be marked with the Wh rating. If your battery is not marked with a Wh rating, Wh can be calculated using the following formula: Wh = Volts(V) x Ampere Hour (Ah). When working with this formula, One (1) Ah is equal to 1000 milliampere hours (mAh). (Wh=V*(mAh/1000))
5. Questions should be directed to 1-888-669-9725.