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Discharge of LiPo Batteries Using Saltwater Electrolysis V.2

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We use this protocol and it's working

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Abstract

Procedure developed using information gathered from the following sources:
How To Dispose Of Lipo Batteries? - Standard Battery (standardbatteryinc.com)

Discharging & Disposing of LiPo Batteries – HeliDirect Support Center (zendesk.com)

https://www.researchgate.net/profile/Alireza-Bazargan/publication/352042531_Discharge_of_lithium-ion_batteries_in_salt_solutions_for_safer_storage_transport_and_resource_recovery/links/61ebe8f78d338833e3895d56/Discharge-of-lithium-ion-batteries-in-salt-solutions-for-safer-storage-transport-and-resource-recovery.pdf

Materials

- 1 sealable container with a vented lid, such as a five gallon bucket
- non-iodized salt
- filtered water
- sealable plastic bag large enough to fit battery

Troubleshooting

1 Place the battery into a container that is sealable with a vented lid, such as a five gallon bucket.

2 Dissolve Non-Iodized Salt into Water in an appropriate container following the measurements outlined in the chart below.

Proper salt (non-iodized)/water ratio to discharge LiVH batteries = 113.4g NaCl/1 Gal H2O or 30g NaCL/1L H2O

Liters of H2O	Grams of NaCL	Notes
3.785	113.4	One Gallon
18.925	567	Five Gallons
1	30	
2	60	
3	90	
4	120	
5	150	
6	180	
7	210	
8	240	
9	270	
10	300	
11	330	
12	360	
13	390	
14	420	
15	450	

3 Carefully pour the salt/water solution into the container holding the battery so that it is completely submerged and covered in several inches of water.

4 Check for activity from the battery and cover the bucket with the vented lid. Bubbles should emerge from the battery's terminal port as electrolysis begins.

5 Monitor the battery and the lid regularly. It is possible that residue may develop along the surface of the salt/water solution, and it may take several changes of the water for the

battery to completely discharge. Complete discharge of the battery could take many days, depending on the size and build of the battery.

6 Battery is safe to be recycled or disposed of when electrolysis is complete and voltage is at a low level. Store the battery in a sealable plastic bag until it is ready to be disposed of.