

Thermoil® Battery De-Mister® Questions Answered

I would like to answer some questions you may have about are products. First the De-Mister. The De-Mister cannot increase life cycles. That's impossible because it is lighter than acid & water and will always float on top.

What we say is that it increases battery life. The reason for that is because 99% of all batteries do not live to their potential full life. Reasons for this. 1. People run them low on water and expose the plates. 2. Corrosion. When you get corrosion now you have resistance so the battery will take longer to charge fully which creates more heat. The longer on charge the more internal heat. The more internal heat the more material being worn off the plate. 3. When you get corrosion that comes from acid loss.

A battery is basically 35% pure acid & 65% pure distilled water. The De- Mister stops all acid and water from escaping thru the vent tube caps so the only way your fluid level would get low is from true water evaporation (acid does not evaporate) so when low you just add distilled water to bring the fluid level back up to normal.

Since you only lost water and no acid the chemistry will always stay the same and with the chemistry staying the same 35% acid 65% water and not being diluted then the battery can perform as expected.

Think of it this way. If you took a drink and filled it 50% whiskey 50% water and drank half of it the remaining half left would still be 50/50. But now fill it back up and drink half of it again it would not be 50/50 anymore because you are drinking some of the whiskey each time so it keeps getting diluted each time.

The battery stops the acid mist from coming out the top of battery which eliminates the corrosion and keeps the battery at the 35% acid content. All you lose is water from evaporation so you add the water back and you will always stay at the 35% acid & 65% water

Battery companies or suppliers will tell you that they tested are product De- Mister and it does not work and some will tell you that it will void there warranty. First of all always remember the more batteries they sell the more money they make.

When you test batteries in a lab it is a controlled test. This is not how batteries are treated in the field. That is why we say just treat half the batteries in your piece of equipment. If you have 6 batteries treat 3 if you have 4 just treat 2 if you have 2 treat 1 etc. This test is irrefutable because all the batteries are the same make, age and size and are going under the same charge & discharge conditions.

Treat half the batteries and you will see that the treated batteries will never corrode, use much less water and will ultimately last longer. Also by adding the De-Mister

you have to remove some fluid from the battery to make room for the 1/3 to 1/2 inch layer that's needed. When you do this take a hydrometer to remove the fluid. This way you are checking the specific gravity in each cell.

If you just purchased a new battery and one cell is lower or weaker than the others do not add the De-Mister then. Take that battery back to your supplier and have him replace it. He cannot then void the warranty because you have not added the De-Mister yet. The national average of new batteries with weak cells is 2% or 2 out of 100. Some battery manufactures average more and some less.

Think of it this way. If you had two new cars and one cars engine had all 8 cylinders at 100% compression and the other had 7 cylinders at 100% and one cylinder at 90% the engine with all cylinders at 100% compression would last much longer because the other engine would have 7 cylinders working harder trying to make up for the weak one resulting in wearing the good cylinders down much quicker.

A battery is something like this. You have one weak battery mixed in with other good batteries then the good batteries are working harder to make up for the weak one and what happens is then the good ones don't last nearly as long because they are working harder to try to make up for the weak one.

Also when you have a weak battery then your voltage drops and amps increase and that's when your ruin contacts, switches, relays, electric motors etc. Anything that's all electric like fork lifts, golf cars, scissors lifts, aerial lifts, scrubbers, sweepers, solar systems etc the most important thing is the batteries because that is where all the power is coming from to run this electrical piece of equipment.

Each battery manufacturer battery is different. Some batteries treated with De-Mister will use 5 times less water and some will use 10 times less but the average is 7 times. As far as how much faster it will charge each battery is different also but all batteries once they get corrosion will take longer to charge.

With De-Mister in the battery you will never ever get any corrosion so it will ultimately charge faster. We always say if you add the De-Mister to a poor quality battery you will have a much better poor quality battery but if you add the De-Mister to a good quality battery then you will have a great battery.

The problem most people have with golf carts, scissor lifts, scrubbers, sweepers, forklifts etc is the manufacture sets the charging systems on this equipment down a little as to not have as much acid & water loss which causes the corrosion and the battery to use more water then exposing the plates and drying them out but by doing this you then end up getting

sulfation in these batteries because they are not being fully charged.

If they would add the De-Mister they can could set the charging systems up so the batteries would receive a full charge stopping this sulfation while eliminating all corrosion and greatly reducing the water consumption because you have the De-Mister in the battery.

Like stated above all battery manufactures make their battery a little bit different. On the bottle of De-Mister we have a quantity chart that states how much to add for different types of batteries.

Take a 6-volt golf cart battery for instance. On the bottle it says to add 4 oz per cell. You could try adding 3 oz to start but if you get any misting effect or the battery top gets moist or wet then you will have to go to 4 oz per cell to eliminate this misting effect and to stop the corrosion.

Like stated above all battery manufactures battery is different so we just take the average and put it on the bottle. In all deep cycle batteries you need at least 1/3 to 1/2 inch layer of De-Mister on top to stop the acid and water loss.

Starting batteries you can most always get by with a 1/3 layer because these batteries do not gas as much as a deep cycle. There have been a few cases where we had to have a 3/4 inch layer of De-Mister but these where big

mining cart batteries that cost over 10 thousand dollars a piece.

Hopefully this all make sense and if you ever have any questions always feel free to give me a call at 920-749-9712 or send me a e-mail at tfellner@thermoil.com