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INFO SHEET

What Kind Of Salt Should I Put In My Pool? A USA perspective.

By Jim Spiess

With salt becoming so prevalent in the swimming pool industry today there are a lot of questions that are arising and not always a lot of answers. The purpose of this article is meant to help you understand the different types of salt currently available for purchase and which of these is best for use with a salt chlorine generator swimming pool application. A lot of pool companies do not even know the answers to the questions and there is very little written about this subject on the internet. Such confusion is understandable considering the rapid growth of salt within the industry as well as so few case studies to understand this important science.

Salt Trends

Pool owners in the 21st century are quickly converting to salt because of the low maintenance and high water quality that result from this process. Fourteen per cent of the pools in America are salt pools right now. Although this may not sound like a lot over 50% of the new pools that were installed last year in the United States included a salt generator. Also, in the last five year there has been a 50 to 70% increase with salt in ground pools in the United States. Currently, the systems are most prominent in Florida, which is understandable with the year round swimming season and the amount of retired people that reside there who are on fixed incomes and want low maintenance.



3 Types of Salt for Pools

Although there are several different types of salt only three types should be used on your pool. Making the right choice on the type of salt you use is critical in how well your pool will maintain its water chemistry and how long your salt generator will last. It also has an impact on whether you will have problems with staining and damage to your pool and its accessories. Salt that is high in purity will give you the least amount of trouble, and the more impurities that are in the salt you use will increase the amount of trouble you have with your pool and your salt cell.

Solar Salt

The first type of salt I want to talk about is solar salt. Solar salt is made by taking sea water and diverting it to a holding area where the sun evaporates the water and you are left with salt. The sea water has brine shrimp and bacteria in it. As the water evaporates and becomes more salty the brine shrimp thrive, but the more water that evaporates will create a salt level that will kill the brine shrimp. These are also known as sea monkeys, the little things you buy when you are at the beach and then you take them home and put them in some water and watch them hatch and grow. Next the bacteria are thriving on the high salt levels too until they reach a point where it cannot survive either and it dies. Now you have dead brine shrimp and dead bacteria in your salt which causes you to have organic matter as an impurity. This means the salt generator has to work harder to create chlorine to kill the organic matter. You will have high chlorine levels in the pool just not free chlorine, and it is free chlorine that kills the bacteria that exist in the water.

Mechanically Evaporated Salt

Next there is mechanically evaporated salt. This salt is created in a similar manner to solar salt but instead of the sun evaporating the water it is done with a generated heat. This heat will kill the brine shrimp and bacteria and also burns off the organic matter. With mechanically evaporated salt you have contaminants that are more on the mineral side. You can have phosphates, nitrates, iron, copper, magnesium, silicates, calcium, and magnesia. This all depends on the area that is being used to produce the salt. Any of the contaminants that I just listed are not good to introduce to your pool. Most of the above will not affect the cleanliness of the water but will instead affect the water balance. It can also affect your salt cell and stain your pool. Staining is generally a problem with concrete pools and not fiberglass pools. Plaster and pebble tech are always curing, so when you introduce salt into a concrete pool with pebble tech or plaster you will generally get some type of reaction if the salt has mineral impurities in it. Removing metals from your pool with the typical metal removing agents is not advised and you should use sequestering agents that are designed for salt pools.

Mined Salt

Finally we have mined salt, which is the purest of the salts, some of which will come with sequestering agents in them. When putting salt in a concrete pool it is recommended that you do a couple of things different than a fiberglass pool. Salt that sits on plaster or pebble tech that has mineral contaminants in it can stain your pool in five minutes. It is recommended that you first balance your pool water before you put the salt in it and then pour it in the deep end and broom it to help dissolve the salt. Salt with high impurities dissolves much slower than a pure salt, so you may also want to add the salt a little at a time in several doses.

Your best bet when purchasing salt is to get it directly from a pool store. Although it may cost you a few more dollars per bag, it's well worth it when one considers the long-term benefits.

I am not trying to scare you away from salt with this information. In fact, just about every new pool we build includes a salt chlorinator. But we also sell fiberglass pools which are much more compatible with salt, so our customers tend to have far less problems than people concrete/gunite (spraycrete) pool owners. If you have natural rock water features with your pool you will want to apply a sealer to the rocks just like you do to your deck because the salt can leave stains on them too.

Cell Cleaning

One final tip is your salt cell should only be cleaned when necessary because acid is used to clean the cell and when you clean the salt cell you remove some of the coating that allows for the electrolysis to work, therefore slowly shortening the life span of the salt cell. The quality of your salt system like the quality of your pool is ever so important to its performance and the life of the salt system.

Australia: Cheetham Salt supplies about 60% of the pool salt here and of the 3 brands Mermaid is the highest purity and fastest dissolving in comparison to Diamond and Sunray brands. As a result the Mermaid brand can be expected to give better outcomes. (less stains, easier to dissolve). Also be aware that some stains on salt water pool surfaces maybe the result of run off after rain, bringing nutrients and minerals from the nearby soil etc. and leaving stained areas on the bottom (or sides) of a freshly painted pool.