

Mineral Pools:

The significant investment in a pool is becoming more complex with a large variety of options available to the consumer.

Different types of pool surfaces, sanitation, filtration and heightened lifestyle expectations.

The tried and tested salt chlorinated or liquid chlorinated pools still have their place, and with innovation, improved control systems and manufacture, are still a benchmark for the industry.

There have been some systems that have been around for a long time but have been somewhat in the background. One of these systems, which has seen a significant take up from the consumer are Mineral Pools Systems.

The Science behind this type of system sounds compelling but confusing to the lay person. What do you need to know, will the initial setup costs prove worthwhile? Can I use my existing equipment to retrofit this type of system on my pool?

A good place to start is to give you some background on what constitutes a mineral pool, what different mineral and elements go into the water and what benefits are claimed for this type of system. On a voyage of discovery I came across this example which I think gives a pretty good explanation of the Mineral Pool story.

Revealing the Facts about Mineral Pools

Most people when building or renovating a swimming pool don't often invest enough time considering the most important element of their pool...the water! Whilst consumers are spoilt with pool sanitation choices there is an emerging trend towards mineral based sanitation.

The idea of mineral bathing is a century's old phenomenon and conjures up the idea of a luxurious experience, rejuvenation, relaxation and enhanced water quality. Everybody has heard of the Dead Sea its salt, mineral, cosmetic and healing properties. It has attracted visitors from around the world for thousands of years.

Mineral pool sanitation systems use varying mineral compositions (some of which are found in the Dead Sea) and have certain effects on the human body as well as the water quality itself. Generally speaking, a mineral pool is a pool that contains, Minerals such as: Sodium Chloride (salt), Magnesium Chloride, Potassium Chloride and Borates naturally occurring minerals that enhance the bathing experience in addition to other essential water balancing chemicals.

A combination of any, or all of these minerals offers several benefits to the swimming pool owner. It is important to understand what each of these minerals offer, so it is worth taking a closer look at each of them:

Sodium Chloride:

Salt is the precursor to making chlorine by electrolysis.

Various levels of salt will be required in a pool depending on the chlorinator manufacturer's recommendations.

The original chlorinators of the 1980's and 90's were based on salt levels of up to 7000ppm.

The higher the salt level, the longer the salt cell would last. At least that was the theory.

The disadvantage of these higher levels was that the water could have a distinct salt taste, added salinity to the environment when water was backwashed and the swimmer needed to shower after swimming.



Today, some residential chlorinators use salt levels as low as 2500 – 3500ppm which is generally below the taste threshold and the water feels more like fresh water. To support this low salt level, the technology of making the salt cells has improved greatly, with warranties of 3 – 5 years now a common practice.

Magnesium Chloride:

The health benefits of Magnesium have been well documented for centuries. The addition of Epsom Salts (Magnesium Sulphate) to baths and spas is a common therapeutic practice that I am sure many of us could relate to. There have been a number of scientific studies around the use of Magnesium chloride that have recorded the effects this composition has on the human body. Evidence suggests that when bathing in magnesium enriched water, magnesium will be absorbed through the skin (transdermal therapy) and offer the bather the following benefits:

- ✦ Soothe the skin, relieving those with sensitive skin to enjoy a swim
- ✦ Detoxify the skin and body, by way of relaxing the nervous system. Perfect for those facing anxiety and stress in their day to day lives
- ✦ Softens and smooth's the water, enhancing the bathing experience
- ✦ And with a Salt Chlorination System acts as a permanent flocculent

Magnesium also has several other advantages when used in swimming pools it aids the clarity of water. Magnesium Chloride flows through the cell and is converted by electrolysis to Magnesium Hydroxide which acts as a flocculent. This flocking capability will help filter out extremely fine material such as dust and dirt, providing a crystal clear swimming pool all year round. In addition to all of this, it will greatly assist in preventing the build-up of calcium scaling on cells, pool equipment and the pool surface.

Borates:

Borates are one of the most effective water enhancers and in Europe we are yet to completely embrace this in our swimming pools.

The benefits of borates in your swimming pool will aid in:

- ✦ Bathers comfort level
- ✦ Introduce a luxurious feel to the water, providing soft silky feeling as you wade through the water.

Not only will the bather have a noticeable difference when they swim, but the water balance and clarity receive a huge amount of benefits:

4 Reasons to Add Borate to Your Swimming Pool

- ✦ It Helps Stabilize pH. ...
- ✦ It Helps Prevent Algae. ...
- ✦ It Reduces Chlorine Usage. ...
- ✦ It Makes Sparkling **and Soft Water**. ...

Step 1: Add the Borate. ...

Step 2: Run the Pump for 24 Hours. ...

Step 3: Test Your Water. ...

Step 4: Test Borate Levels Monthly.



Healthy - Mineral Pools

Potassium Chloride:-

The benefits of Potassium Chloride are less well documented and most references dwell on the medical benefits of oral consumption (Potassium is essential to the functioning of several body organs). In this application it is more used as a precursor for chlorine production by electrolysis.

Mineral Pools a Growing Trend:-

A Mineral Pool System, opens up the opportunity for Pool owners to create a mineral bathing destination in their own garden.

The luxurious water quality offers home owners a lifestyle that could traditionally only be sourced in spas, resorts and natural occurring springs.

The Wellness market is estimated to be worth over \$200 Billion dollars a year worldwide and is predicted to reach a Trillion dollars in the near future.

This obviously includes segments such as health foods, gymnasiums, corporate wellness programs and personal trainers.

All of these however build the popularity and awareness of Health and Wellness.

Recent research and market evaluation shows an enormous demand for mineral pool systems.

Pool builders are responding to the availability of ‘Mineral Pool Systems’ much as they did when salt chlorinators were first available.



When a bather swims in a Mineral pool there is a noticeable improvement in the feel of the water when compared to a normal chlorinated pool.

While not as noticeable as soaking in a Radox™ bath, the bather will experience the benefits such as feeling more relaxed and easing of sore muscles.

Certainly the skin and hair will feel moisturised and if they have sensitive skin they will not experience the usual itch or tenderness.”



**For further information Contact
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