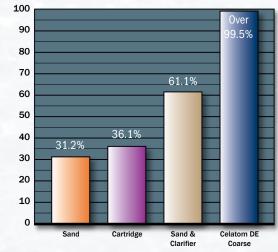
# Filtration Media Clean. Provides a sparkling pool day and night Celatom® Diatomaceous Earth for swimming pools provides

the ultimate in water clarification and gives you a pool that truly sparkles. Diatomaceous Earth filter powder (DE) is the most efficient dirt removing filter media currently available. It can filter particles down to 2 microns. The human eye can only detect particles down to 40 microns. However, large quantities of microscopic contaminants have a noticeably negative effect on water quality. Filtering out of these small particles is needed to provide water sparkle.

Thousands of cases of swimming pool cryptosporidiosis have been reported (Lemmon et al 1996, CDC 2001a) and public pools can be temporarily shut down as a result. Diatomaceous Earth filtration physically filters out cryptosporidium ocysts, giardia cysts and other protozoa which are resistant to chlorine disinfection, even at maximum recommended dosages, without the need for a chemical coagulation (see chart below). Other filtration medias, such as sand require the use of costly chemical coagulants and more stringent pH control chemicals to form the flocculants required to remove the harmful bacteria.

#### **Results of Independent Cryptosporidium Study Conducted** by University of North Carolina, Charlotte



Percent Crypto Oocysts Filtered

**Filter Type** 

- Filters out particles associated with recreational water illness
- Enhances filter productivity reducing chlorine & shock use

Risks can also arise out of the use of excessive chemical disinfectants or from their by-products. Disinfectant by-products arise when chlorine reacts with organic matter such as found in sloughed skin, sweat and urine and forms organohalide compounds such as chloroform. The ability to filter out many of the particulates and contaminants in the pool will also reduce the chemical demand (COD) in the pool, meaning the chlorine you add will be effective longer. This allows you to maintain your desired chlorine residual with less chemical addition. Adding less chlorine translates to reduced disinfection by-products.

Celatom Swimming Pool Diatomaceous Earth is made from fresh water diatoms. Each bag or box you purchase contains billions of these microscopic single cell plant skeletons, which flourished millions of years ago. The diatomaceous earth is processed to provide high purity and uniformity to provide the superior filtration characteristics our customers have grown to expect, such as, optimal flow rate, extended cycles between backwashes and cleaning, sparkling clarity and cleanliness, and ease of cleaning.

### **How Do I Properly Dose My Pool?**

Using the correct amount of DE on your filter is important to extend time between cleanings and to provide the sparkling clarity you desire. The basic standard in preparing a diatomite filter is to precoat the filter grid with approximately one pound of Celatom per 10 square feet of filter area. A convenient use of measure is one quart or 4 cups. It is equivalent to approximately one-half pound of diatomite.

A common procedure in precoating is to thoroughly mix the proper amount of Celatom into a pail of water, form a slurry, then feed it into the filter via addition to the pool skimmer. Filter manufacturers instructions may contain more details, so we recommend you follow the recommendations of your filter manufacturer.

## How do I know when to backwash my filter?

When you first start up your filter, record the reading on the pressure gauge. Usually the filter will require backwashing when the pressure gauge is 8-10 pounds above the clean, starting pressure. You may have to backwash several times depending on the filter type. You typically want to backwash until the water runs clean, 2-4 times.

# Frequently Asked Questions

# How often should I clean my filter?

You should clean your DE filter at least once per year. If you are using biguanides you should do it twice per year to prevent the filter grids from "gumming up". Thorough cleaning is accomplished by turning off the pump and draining the filter, removing the top half and hosing down the grids. If using a filter cleaner product, make sure to rinse thoroughly before reassembly.

# How can I extend time between backwashing?

If you notice an abnormal increase of dirt or debris in the pool from weather or an increased number of swimmers, you can add a small amount of Celatom into the skimmer to help prevent rapid pressure increase.

# **Troubleshooting Tips**

A clean sparkling pool is maintained by proper filtration plus sanitation plus circulation. You must have all three to get the water quality you desire.

#### **Poor Clarity - Look For:**

- · Damaged elements, gaskets or seals
- Incorrect or insufficient precoat of DE onto the filter
- Inadequate chlorination
- Filter element surface blinding due to oily dirt penetration
- Plugged feed pump

#### **High Pressure or Short Cycles - Look For:**

- · Inefficient filter cleaning
- Incorrect or insufficient precoat of DE onto the filter
- Increased dirt loading, above normal operations
- Undissolved chlorine or algaecide residual that causes a
- · colloidal or gelatinous slime

