The Detoxolite™ Journey



Avini Health's Cell Defender (CD) is the original "liquid" zeolite (colloidal suspension) and the "category creator" for zeolite products used for health and wellness. Over 5 million bottles have been sold worldwide, generating thousands of testimonials from satisfied customers. There is no product on the market that helps remove toxins from the body as effectively, or as safely, as Cell Defender.

When I first reviewed the concepts of zeolite for detoxification, it struck me that there were two major issues with any product that had previously come to market:

First – The particle sizes were WAY too big. I analyzed products that had particle sizes ranging from over 5 microns all the way up to 200 microns. It is well understood that any particles greater than 4 microns really cannot be absorbed from the digestive tract into the bloodstream. We would need to be able to consistently reduce particle sizes below 5 microns to enable absorption from the gut, and less than 2 microns to ensure systemic detoxification.

Second – Zeolites are very dirty when they come from the mine site. Since zeolites naturally attract and hold onto a variety of toxic compounds and metal ions; it just makes sense that any zeolite in an open mine will pull in anything that it touches through contact with wind or water. In this case, the zeolite is "Nature's filter." We knew that we would need to find the best ways to remove those toxic compounds from the mined zeolite in order to maximize its effectiveness.

Micronization

To deal with the first problem, we created our proprietary micronation process. The first step in this process begins by milling pure clinoptilolite zeolite into ultrafine particles. This milling process reduces the zeolite's particle size to less than one micron. This is important because the smaller the size of the particle, the more readily it can become a colloidal suspension and be absorbed into the bloodstream. This micronization process utilizes pressure and centrifugation to continually "grind" the zeolite smaller and smaller until it reaches the consistency of a very fine powder. Many zeolite products skip this step and simply place raw zeolite or un-micronized zeolite into canisters or capsules.

(Most commercially available zeolites measure between 2 and 40 microns). Zeolites greater than two microns are primarily beneficial as digestive cleansers as they are far too large to allow for absorption from the digestive tract into the bloodstream. In order to utilize the zeolite as a systemic detoxifier, the crystals need to be reduced in size to less than two (2) microns.

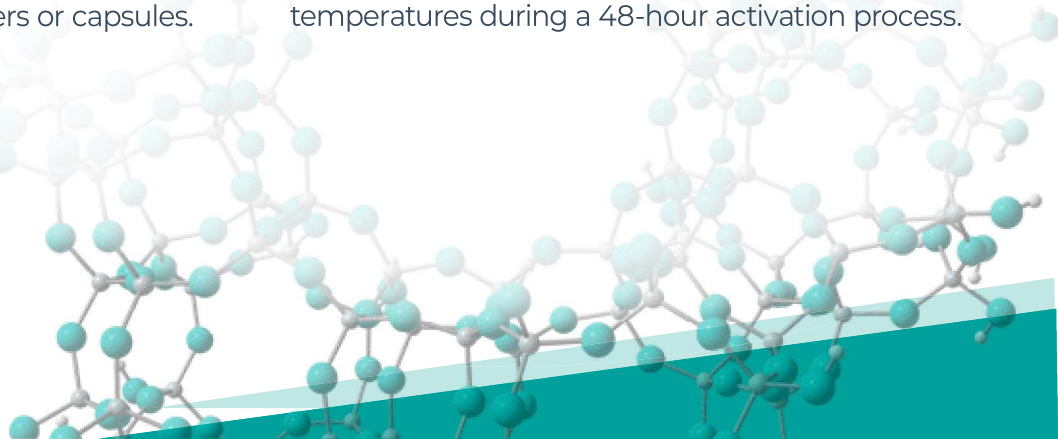


The zeolite in Cell Defender is micronized to an average particle size of less than 1 micron with the smallest particles measuring 0.39 microns (390 nanometers).

Activation

To deal with the second problem, we spent years developing our proprietary activation process. It is during this process that the micronized zeolite is cleaned and sterilized. This is an important process because zeolites, being formed over millions of years, can absorb harmful elements, including metals and toxins. Avini Health's proprietary activation process "cleans out" the cage and ensures a superior and unique product. During the activation process, the micronized zeolite is added to purified water and heated. A proprietary blend of natural acids is then added and heated at various temperatures during a 48-hour activation process.







This activation process cleanses the zeolite – emptying the zeolite cage – ensuring no unwanted substances are present in the final zeolite solution. The water aids in this exchange of compounds and stabilizes the zeolite charge. It is during this process that the product becomes a colloidal suspension, allowing the micronized zeolite particles to be suspended in an ultra-purified water solution. The solution then goes through a sterilization process of extreme heating and cooling. This process ensures that any bacteria and microbes that may be present are completely eliminated. The solution is heated – 180 degrees and higher – which separates the microbes from the material. This layer of unwanted material is removed from the solution. During this process, the natural acids are continually entering and displacing any microbes and other unwanted substances that may exist in the zeolite – further strengthening the charge of the zeolite solution. This dual activation process of cleansing and sterilization is cycled through over and over again until no unwanted materials exist. The conclusion of this step yields a pristine zeolite in ultra-purified water.

Summary

These processes were developed in 2003 to make our first commercial zeolite product, and they have improved over time. While we created the concepts of micronization and activation, many unscrupulous manufacturers and marketers have borrowed these terms to support their inferior zeolite products. In order to uniquely position the Avini Health products from the low-level knock-offs, we have trademarked “Detoxolite.” For all future productions, our products will be labeled with the branded zeolite ingredient that ensures the material has been micronized and activated. Distributors and product consumers can feel confident that they have the real product that has been proven time and time again over the last 20 years to be safe and incredibly effective. Products labeled with Detoxolite are the only products that can rely on our published research and thousands of amazing testimonials.

