

Competitor Rhetoric

Natural Extracts Australia Pty. Ltd. ('NEA') is an all Australian company specialising in natural pharmaceuticals, cosmetics and industrial products. NEA has been producing ZeoActiv8™ using Australian Zeolite (see <Why Australian Zeolite>) since 2007. It is available to medical practitioners, naturopaths and health care professionals, and is prepared to a careful scientific formulation by an Australian registered Compounding Pharmacy under legislated Australian Pharmaceutical Standards.

Our products have been quickly accepted by the Australian market with an increasing number of users who have switched to ZeoActiv8™ from other brands. Unfortunately this brand change has led to a concerted campaign of misinformation from some local distributors of our overseas, embedded competitors (some of which are MLM's).

Still as they say 'every cloud has a silver lining' and the viral marketing methods that have been used to attack our Australian product have actually been beneficial in increasing our brand awareness. As our market penetration increases, these attacks become more frequent and vehement.

Up till now we have chosen not to respond to this misinformation. However a number of our practitioners, health care professionals and customers have asked us to comment on these accusations.

NEA is responsible for the science behind ZeoActiv8™ and we make no disclaimers in relation to the science here or anywhere else. We have set out below the correct scientific facts and our detailed responses particularly in relation to our product ZeoActiv8™.

1 Internet

Accusation: There are no links on the Internet

Fact: ZeoActiv8™ has a web address, it is www.ZeoActiv8.com and it has been there for just over three years, the life of the product. The accusation is obviously false. This web address will now bring you to the product page. The previous website has now been incorporated into the Natroceuticals website.

2 Registration

Accusation: ZeoActiv8™ is not registered in Australia and manufacturing it here is illegal.

Fact: ZeoActiv8™ is manufactured under pharmaceutical and ISO9001 conditions in Australia by an Australian Compounding Pharmacy. As such, the product comes under the Pharmacy Act and is not required to be registered by the TGA. It is manufactured and sold under the Pharmacy Act. Zeolite, the active ingredient, is not an 'S' Scheduled product and can therefore be legally sold through a compounding pharmacy.

A statement that the only way to purchase ZeoActiv8™ is to become a 'Not For Resale User' is totally false. Those needing to use the product call the Compounding Pharmacy directly on 1300-882-329 and it will be dispensed worldwide.

NEA has prepared a submission to have ZeoActiv8™ first listed and then ultimately registered with the TGA so it can be used in all medical areas as well as be accepted for use in Australia hospitals. IT IS NOT SOLD UNDER A MULTI LEVEL MARKETING SYSTEM AS ARE SOME OF OUR COMPETITORS. ZeoActiv8™ is already being prescribed and sold legally by a growing number of medical practitioners and many naturopaths and other healthcare professionals.

3 Clinical Research

Accusation: ZeoActiv8™ has no clinical research

Fact: NEA has conducted a great deal of research on its product. Refer to all the science and research information, safety and toxicology information, test results and reports available on this web-site. NEA is conducting specific trials in relation to certain conditions and when these trials are completed the results will be made available to

ZeoActiv8's™ users and others that are interested from a professional perspective. Some of these are detailed in point 15.

4 TGA

Accusation: The TGA is attempting to halt distribution or sales.

Fact: This statement is totally false. This statement confirms that some individuals will resort to any method to discredit not only our product but also our company as well. However some other liquid zeolite products cannot be intentionally sold in Australia.

5 Particle Size

Accusation: ZeoActiv8™ contains no sub-micronised particles and the particle size is between 2.5 microns to 10 microns with the average size being 3 microns.

Fact: The raw zeolite material in ZeoActiv8™ has already been reduced down to an average size down to under thirty microns. It is then carefully washed in solutions that remove any contamination that may have occurred from the time the raw material was mined until it has been processed ready for transportation to NEA's premises. Often this is only a matter of a few hours. IT IS NOT WASHED IN ANY ACIDS.

The raw material is then sub-micronised in a proprietary process that further reduces the size. It is filtered, heat sterilized and then activated by washing it in special solutions again. At this point, batch samples are taken so every batch is analysed for particle size and purity. After batch samples are taken the treated zeolite is carefully stored in specifically sealed containers ready to be used in our products.

The results of the batch samples are set out in reports produced by independent laboratories using the latest electronic equipment. One of these is a precise, particle size report. An example of one of these reports appears on the next page.

The particle size report (reproduced on the following page) is one of a number that have been done using a Malvern Hydro 2000MU laser particle size scanner. It shows, [where the two red lines intersect], that over approximately 80% of the particles, [the numbers on the right hand side of the chart], are below one micron [the numbers on the bottom of the chart]. In the closest yellow column the figures show that the % volume of the sample. At a micron size of 1.096 or less is the equivalent of 84.5% of the total sample.

Now which product is the smallest? The minimum particle size for ZeoActiv8™ is 0.219 of a micron and the maximum particle size is 2.1 microns. Compare this with the American product which is between 0.41 and 5 microns as stated in our competitor documentation.

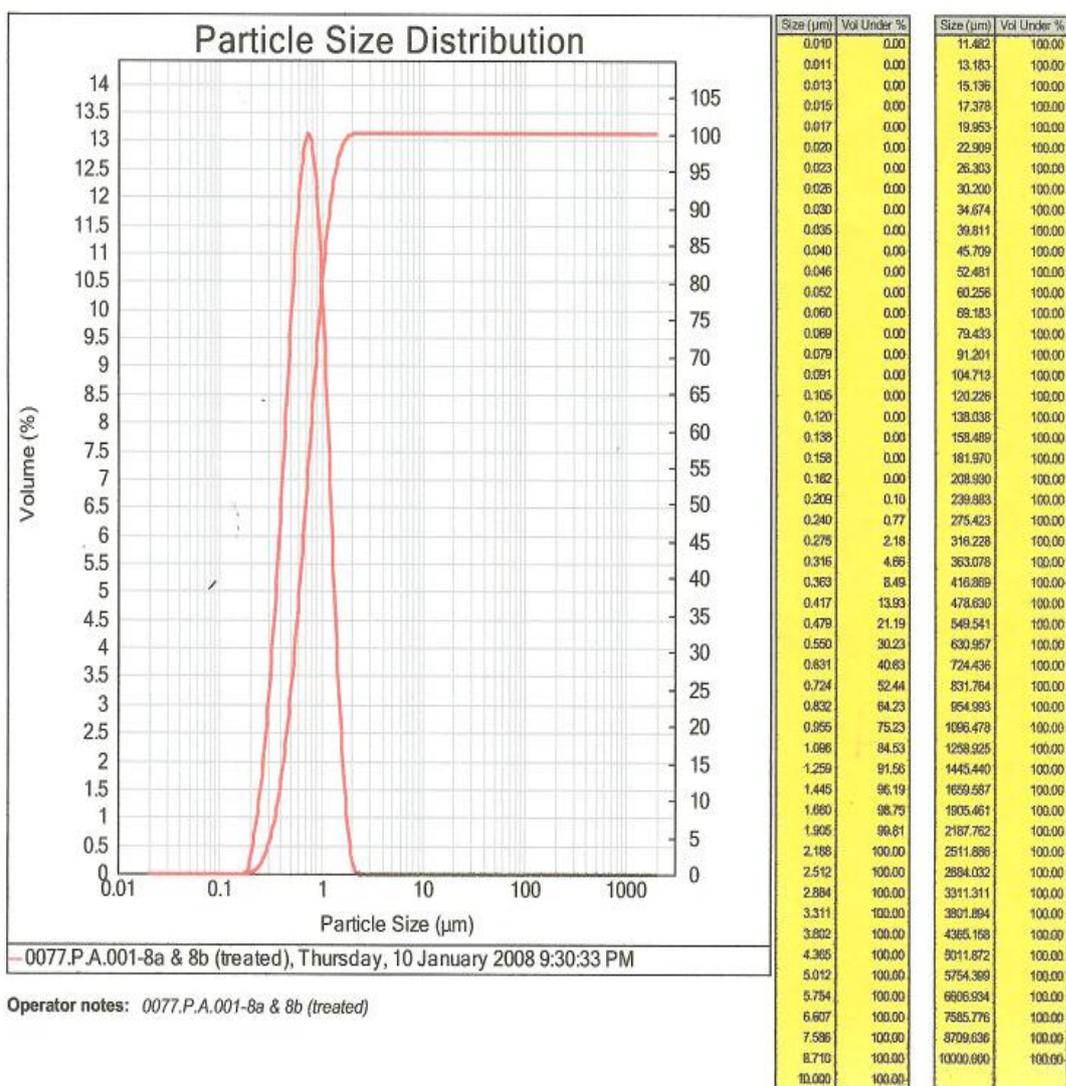
Malvern Hydro2000MU Laser Particle Sizing

Services Requisition: 0077.P.A.001 **Supplier:** Zeolite
Sample ID: 0077.P.A.001-8a & 8b (treated) **Measured by:** ouo
Date: Thursday, 10 January 2008 9:30:33 PM **Analysis model:** General purpose

Particle Name: Fraunhofer **Particle RI:** 0.000
Dispersant Name: Water **Dispersant RI:** 1.330
Absorption: 0 **Obscuration:** 16.82

Vol. Weighted Mean D[4,3]: 0.759 um **Result units:** Volume
Surface Weighted Mean D[3,2]: 0.625 um **Specific Surface Area:** 9.61 m2/g

D(0.10) : 0.38 µm **D(0.50) :** 0.70 µm **D(0.80) :** 1.02 µm **D(0.90) :** 1.22 µm
D(0.97) : 1.50 µm **D(0.98) :** 1.58 µm **D(0.99) :** 1.70 µm **D(1.00) :** 2.26 µm



6 Contents of Heavy Metals

Accusation: ZeoActiv8™ contains 4.37 times the heavy metals than the American competitor's product does.

Fact: What does this mean? There are no heavy metals in ZeoActiv8™. We have had many samples of the zeolite used in ZeoActiv8™ analysed by the CSIRO and they bear no resemblance to the figures quoted in our American rival's document. We use the same zeolite that is used by major agricultural feed companies for putting into cattle and pig feed. The same zeolite is used in Singapore to filter their drinking water supplies. If there was any chance of heavy metal contamination none of these users, would or could, contemplate using it.

There is no reference as to which zeolite is being referred to and what tests were done to be able to make such a claim. In relation to the metals within all zeolites and a direct comparison between the American competitor and ZeoActiv8™, refer to point 11.

7 Use of Preservatives

Accusation: ZeoActiv8™ contains preservatives.

Fact: Of course ZeoActiv8™ contains preservatives. But they are only natural plant preservatives. Nearly all liquid products once opened are susceptible to bacterial infection, even water. That applies to both ZeoActiv8™ and all our competitors. For further information on this refer to point 12.

8 Absorption Ability

Accusation: ZeoActiv8™ has only 20% of the absorption and 20% of the heavy metal removal ability as our competitor product.

Facts: What evidence are these numbers based on? There does not appear to be any mention as to how the numbers were determined. As ZeoActiv8™ has smaller particles than its American counterpart (refer point 5) one would think ZeoActiv8™ would pick up far more heavy metals than the American product. In addition as ZeoActiv8™ has more zeolite in it than our offshore friends, this would mean that it would be far superior in absorption capability.

The Appendix Comparison of the Two Products

9 Particle Size

Accusation: The American product has a range of particle size between 0.41 to 5 microns [their own figures] and ZeoActiv8™ contains no sub-micronised particles with the smallest particle size of 2.5 microns.

Fact: We are absolutely astounded that a distributor or agent of this multi level marketing company can make such a definitive statement without any evidence to back it up. The statement is totally false. ZeoActiv8™ has a particle size of 0.219 to 2.1 microns which is far less than the American product and is taken directly from the laser tests [see sheet set out in point 5].

10 Plasma Concentration

Accusation: There is no data on ZeoActiv8™.

Fact: No one behind or associated with the accusations has approached NEA for any detailed information in relation to its absorption properties. We note that the competition states that their product is absorbed into the blood stream. NEA believes that nearly all ZeoActiv8™ stays in the intestinal system and does not enter the blood stream.

Accusation: ZeoActiv8™ contains Si, Al, Mg and K while the American product contains Si, Al, Mg, Ca and K. [the atomic symbols stand for silicon, aluminium, magnesium, calcium and potassium [the 'K']].

Facts: Well yes, ZeoActiv8™ does contain all those elements just the same as most other zeolite products do. However it would appear that this comparison has been made to show that there is no calcium (refer to the table on the first page on the accusation document appendix) in ZeoActiv8™ which is totally false. In fact based upon the competitor's own tables, there is 0.54% calcium in ZeoActiv8™. So let us examine the real numbers, what does ZeoActiv8™ actually contain?

A number of samples of the raw material used in ZeoActiv8™ were submitted to the head office of the CSIRO, Division of Minerals in Clayton Victoria. Contact details are available from us. They were submitted for the purpose of determining (analysing) the major and minor trace elements within the samples. The CSIRO is one of the world's most prestigious scientific organizations and the premier scientific body in Australia.

We have taken the CSIRO's determination of each element's percentage by weight of the various five elements under review for five different samples supplied by NEA to them. NEA has then taken an average of each metal over all five samples. These are presented in the left column. The figures in the right hand column are those directly taken from our competitor's own figures.

<u>Element</u>	<u>CSIRO % wt</u>	<u>American Product</u>
Si silicon	71.81	65.23
Al aluminium	12.56	11.21
Mg magnesium	1.01	3.77
Ca calcium	2.78	2.81
K potassium	1.36	2.40
Others		
Fe iron	1.14	.43
Na sodium	1.88	1.21
Mn manganese	0.04	0.03
P phosphorus	0.05	0.08
S sodium	>0.01	>0.01
Hg mercury	>0.0001	>0.0001
Pb lead	>0.005	>0.005

It can be seen how very similar the two samples are considering that the zeolite is from two different continents.

In fact all zeolites have many minerals within them because of the very nature of how they were formed. They are all very similar as they have a similar mineral content in that they are composed mainly of silicon, oxygen and aluminium which form the three main ingredients, and that is why they are called 'alumino silicates'.

In addition there are approximately twenty or so other elements present in all of them but in far lesser quantities. For example those other elements constitute about 7.26% of the ZeoActiv8™. There are no 'species (*sic*) of heavy metals present at significant levels' as stated in the competitor's documentation.

Of the five major elements (minerals) which are in zeolite all are needed by the body. In relation to contamination, ZeoActiv8™ is sold in glass bottles because a number of health and scientific bodies have big reservations about selling any zeolite product in plastic bottles because of the potential contamination by the chemicals leaching out of the plastic.

12 Micro-Analysis

Accusation: ZeoActiv8™ has no bacterial or fungal growth but it does contain preservatives.

Facts: Yes it contains preservatives because if it didn't, the moment the top was opened would allow contamination of bacterial infection and/or fungal growth to commence. Even pure distilled water once opened to the air will quickly become infused by bacterial and fungal infections. ZeoActiv8™ has only natural plant preservatives in it.

The accusations state that the American product does not contain any organic preservatives. If it doesn't contain organic preservatives, what preservatives does it contain?

The product's literature states that it is all natural but washed in strong acids. NEA does not believe that a product can still be called 'natural' after being washed in acids, but then you be the judge.

13 Powder Diffraction Analysis

Accusation: That the American product is conclusively clinoptilolite while ZeoActiv8's™ elements suggest it could be clinoptilolite.

Facts: Of course ZeoActiv8™ is clinoptilolite! What else would it be after looking at the two products mineral profiles in point 11 and the mine it comes from. To suggest however that ZeoActiv8™ is somehow a pretend or inferior clinoptilolite is absolutely ridiculous. By any measure it is clinoptilolite and to infer otherwise shows a total lack of understanding of geology. You only need to look at how similar the two samples are to realize that they are the nearly identical in their mineral structures. What makes a difference is the way it is processed. However we have had the samples examined by the University of New South Wales in Sydney using x-ray diffraction testing.

The Australian clinoptilolite in ZeoActiv8™ has been carefully researched, examined and described by Michael Leu, B.Sc. (Hons 1). Michael is a geologist with over 25 years experience in mineral exploration. He has been actively involved in the exploration, research and development of natural zeolites both within Australia and around the world. He is one of the world's leading experts in relation to zeolites and a member of the world zeolite association. He has published a number of scientific papers on zeolite and its uses. Mr. Leu has discovered that the zeolite after its sub-micronisation and activation does not contain any muscovite (mica) which is present in nearly all other zeolites. Again, this is due to the way it is processed.

The seam of ore that the raw material for ZeoActiv8™ is mined from is many meters thick and red in colour. It was formed over 300 million years ago. The seam was created from one huge continuing eruption which laid down thousands of tonnes of ash. This ash has been compacted over time into a very hard rock. It was uplifted millions of years later, after it had been covered with overburden, and it has remained that way until about 15 years ago. It does not have any seams of other material such as clays, gypsum and silts within its one huge seam as do most other mines in other countries such as the USA and Mexico [refer to Australian zeolite in another part of this web site]. Although the zeolites in the USA are only 30 million years old they were still formed much the same way as the Australian zeolites were.

Its mineral and chemical structure has been tested and checked many times over by the mine itself, its customers, the Mines Department of New South Wales and other government bodies such as the Agricultural Departments of the States where the zeolite is used in animal feed and water purification. It has a Veterinary Permit approval [VPMA-011051] that it is safe to be used in animals which are to be processed for human consumption.

14 Active Surface Area

Accusation: The accusation document claims that the American product has the highest ratio of available surface area (1gm has 90² feet in area) while much of the surface area of

ZeoActiv8™ is already occupied by metals.

Facts: First let us deal with the actual area of the two products. The American product has stated that it has an area of 90² feet per gram. In a 16 page analysis just completed by the Royal Melbourne Institute of Technology's ('RMIT') Department of Applied Chemistry in Melbourne, it was determined that ZeoActiv8™ has a BET surface area of 62.76² meters per gram. This equates to 675.54² feet which is a wee bit more than our American friends. This gives ZeoActiv8™ maximum chelating powers and very strong cation exchange abilities.

ZeoActiv8™ is filtered, heat treated and cleaned with special natural liquids that cleanse the cages of any residues that may have been absorbed from the time the ore was mined until it is sub-micronised and sealed ready to be used in the product. There are no free metals occupying space within the raw material other than those normally combined within the tetrahedra structure itself. [refer to other parts of this web site for a more detailed explanation]

15 Clinical Research

Accusation: There are no clinical trials conducted with ZeoActiv8™.

Facts: NEA has already conducted a number of clinical research trials on our product but they all take time to complete and require a good deal of research funds. NEA doesn't refuse to provide details of these but they try to make sure the trials have been completed before releasing the results.

- (a) NEA has produced a 16 page safety and toxicology report.
- (b) NEA has organized for an independent PhD review and study all the information to determine the NOAEL levels for ZeoActiv8™. This study is over 1,000 pages including appendices. The NOAEL (No Observed Adverse Effects Level) needs to be determined before a product can be registered with the TGA.
- (c) NEA has produced an OECD 420 Acute Toxicity Test on the raw zeolite (the active ingredient) used by NEA in ZeoActiv8™.
- (d) NEA has produced an OECD 420 Acute Toxicity Test on the product ZeoActiv8™ itself.
- (e) NEA has produced two OECD 471 Reverse Mutation Assay Tests to show that ZeoActiv8™ and Zeo Nutrient+ (a new antioxidant product containing zeolite) are not a mutagenic, which could lead to cancer.
- (f) NEA is currently undertaking a number of other heavy metal and medical trials into certain conditions. These are not complete and results will be released as and when they are completed.

NOW FOR SOME COMPARISONS OF OUR OWN

16 Materials Provided

Facts: In the CSIRO study it required two bottles of ZeoActiv8™ and seven bottles of the American product to carry out any studies. This is because ZeoActiv8™ uses a 50ml glass bottle while they use a 15ml plastic bottle.

The cost of the materials

ZeoActiv8™ - 2 bottles (100 mls) @ \$50.00 per bottle	\$100.00
American product - 7 bottles (105 mls) @ \$65.00 per bottle	\$455.00

There is a huge difference in price for basically the same amount of 100mls of product. Everyone needs to think about what they are receiving for their dollar particularly with the current financial situation. We have seen that a current email offer being circulated states that the price will climb by over Au\$100 above the current price for a 15 bottle pack after current stocks are exhausted.

The price should rise even higher should the Au\$ fall further against the US\$.

17 Amount of Zeolite in Each Bottle

Facts: The Commonwealth Scientific and Industrial Research Organisation, (the 'CSIRO') was asked to compare the amount by weight of zeolite in the American product compared to ZeoActiv8™.

Four bottles of the American product (4 x 15ml) and 60 mls of ZeoActiv8™ and they were all tested. All the products were decanted and evaporated to dryness in an oven at 85°C. After evaporation, the remaining dry material was weighed.

These results were:-

	<u>Wgt. per 60ml</u>	<u>% in a 60ml bottle</u>
ZeoActiv8™	600 mg	1.0
American product	300 mg	0.5

Clearly, ZeoActiv8™ has twice the active ingredient than that of the American product. This effectively means that to have the same intake of zeolite as a 50ml bottle of ZeoActiv8™, one would need to consume 8 bottles of the American product. The cost comparison is \$50.00 (one bottle x 50mls) for the ZeoActiv8™ and \$455.00 (7 bottles x 15mls [having half the strength]).

18 Why the Need to Denigrate ZeoActiv8

This is interesting because it shows that ZeoActiv8's™ success in such a short time has reached such a point, that the persons behind the accusations on the other web sites thought it necessary to do so to try to stem our product's increasing popularity. A popularity gained because of its effectiveness both in the way it works and its cost.

ZeoActiv8™ have research papers from many scientific organizations such as the CSIRO, RMIT, the University of New South Wales and many others. There are two major toxicology reports and a backed up by two fully independent acute toxicology reports and two AMES tests.

It is very disappointing that this eight page document has become necessary.