

# Globalium Zeolith

## Active clinoptilolite – medical device

## An effective antioxidant & a natural cell protection preparation

### Antioxidants / Radical scavengers

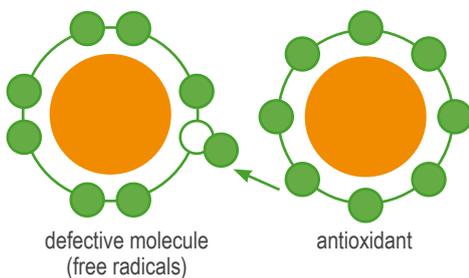
#### How do radical scavengers work?

Simply put, an antioxidant binds potentially harmful free radicals and “takes them out of circulation” – a radical that is bound in this way cannot cause any more damage in the body! There are many different mechanisms (some produced naturally in the body, some administered) designed to achieve this objective, but in the end they all have the same positive effect – the harmful substances are “locked up”.

The natural defences of our bodies are quite capable of dealing with a “normal level” of oxidative stress brought on by evolutionary biology without assistance, but nowadays we are exposed to immense burdens from other sources, all of which result in oxidative stress, and our system is overwhelmed more often.

Free radicals do not pose a problem for our bodies as long as there are sufficient antioxidants available. But when too many free radicals form and are not removed, all biological structures suffer lasting damage.

So it is absolutely essential to help our bodies in as many ways as possible.



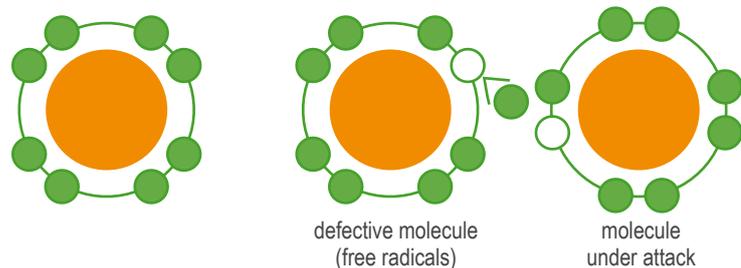
### Illustration of antioxidative processes

Antioxidants intercept free radicals directly, and neutralise them by donating an electron to them without themselves becoming free radicals. Sometimes they become radicals as a result of the process, but these radicals are stable and completely harmless. (Graphic: AIRNERGY AG)

### Oxidants / Free radicals and their consequences

#### What are free radicals / oxidants

Free radicals are atoms or molecules that have one or more unpaired electrons and therefore react very readily. They are capable of modifying and/or compromising practically all chemical compounds that occur in the body. This is caused by the tendency of unpaired electrons to break the attraction that keeps other electrons in a compound.



### Illustration of oxidative processes

Free radicals attract single electrons away from intact structures (in this case a molecule). The molecules or atoms that are attacked in this way then become free radicals themselves. A chain-type radical transfer reaction takes place. (Graphic: AIRNERGY AG)

### How are free radicals formed?

The formation of free radicals is a part of the normal metabolic process; **however, excessive quantities of free radicals lead to pathogenic oxidative stress.** This is promoted/caused by:

- uptake of environmental toxins (airborne pollutants, heavy metals, pesticides)
- consumption of alcohol, tobacco and foods that are rich in fat
- physical and mental overexertion (excessive training, stress)
- consumption of various medications (antibiotics, hormone preparations such as the “pill”, painkillers)
- UV radiation and ozone pollution
- Chemotherapy and radiation therapy

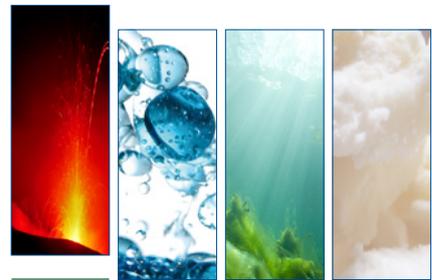
### What are the effects of “oxidative stress”?

Excessive amounts of free radicals lead to oxidative stress and the continuing oxidation processes initiated thereby can cause damage to healthy cell membranes and other biological structures.

The loss of an electron turns the oxidised molecules into free radicals themselves. A dangerous chain reaction is initiated, which creates a steady stream of new, aggressive particles. These destructive processes at the cellular level significantly aggravate the following health problems.

- Acidosis
- Immunodeficiency
- Vascular diseases and consequences thereof (e.g., heart attack, stroke)
- Neurodegenerative diseases (Alzheimer’s, Parkinson’s)
- Tumour diseases
- Genetic material damage
- Accelerated aging process

# Globalium Zeolith



## Quality features

**Globalium Zeolith is approved for use as a medical device.**

The manufacturing process is carried out in accordance with the EN ISO 13485 certified quality system.

### The raw material

Natural zeolite (clinoptilolite) of the highest possible purity class, with a very high natural silicon content. The proportion of silicon and aluminium oxide (silicon salts and silicic acids) is ideal in this substance -  $\text{SiO}_2 : \text{AlO}_2 = 4.9 - 6.2 : 1$

The raw material has an ideal pore size of 0.4 nm. As a result, useful minerals and vitamins are not absorbed and eliminated.



## Ingredients

The Globalium Zeolith medicinal product consists entirely of natural zeolite with no admixture of bulking or anti-caking agents.

- contains no GMOs
- vegan
- lactose free
- unirradiated
- halal
- kosher

## Tribomechanical activation

The Globalium Zeolith medicinal product is based on a modified natural clinoptilolite, which is manufactured in a unique production process called PMA microactivation.

In a controlled self-collision, the particles are not only comminuted by the effects of strong kinetic energies, they also undergo a modification that results in a larger contact surface and thus also further improved cation exchange effect and better filtering effect than an untreated material.

## Application areas

### • Protecting body cells by binding free radicals

An excess of free radicals constitutes a burden on and a disruption of the natural, extremely finely tuned metabolic system.

A large proportion of free radicals is formed in the digestive tract. The action of administered antioxidants such as vitamin C, vitamin E, carotenoids etc., is confined mainly to the blood or the area of the cell membranes.

The Globalium Zeolith medicinal product begins neutralising free radicals where they form in the digestive tract, before they can trigger a chain reaction at the cellular level.

### • Supplying the body with important minerals

The Globalium Zeolith medicinal product not only helps to adsorb, bind and eliminate harmful substances, on the other side of the equation the body is supplied with essential minerals such as natural magnesium and calcium. This process takes place as result of the high ion exchange capacity of the Globalium Zeolith medicinal product. In addition, the displacement of harmful substances from the receptors (docking sites) in the small intestine serves to improve the uptake of trace elements from our food.

### • Helping to relieve the burden on the liver, kidneys and gastrointestinal tract

The Globalium Zeolith medicinal product acts like a sponge in the gastrointestinal tract. It binds free radicals, heavy metals (lead, mercury, cadmium, caesium etc.) and metabolic waste products (e.g., ammonium). These substances are then excreted naturally via the digestive process. This in turn helps to relieve the burden on organs including the liver, the kidneys, the gut and the skin, and increase the level of antioxidant protection.

### High quality violet glass

The Globalium Zeolith medicinal product is supplied in a violet light protection glass container. One effect of this combination is that the energetic load on the body from heavy metals is compensated almost entirely (98.5%).\*

\*Life-Test study of 12/2012 U. Arndt

### Simple administration

Mix a level teaspoonful (about 3 g) of the Globalium Zeolith medicinal product into a little water or juice and drink about 30 minutes before each main meal.

While you are taking this medicinal product, you should drink at least 1.5 litres of fluid every day. This promotes the elimination of the substances that are bound by the zeolite.

**Safe use** / The basic substance (lattice structure) of the Globalium Zeolith medicinal product is not metabolised, i.e., it is not absorbed by the body at all. Elimination takes place naturally (in the stool) within 24 hours without burdening the metabolic process.

### Available pack sizes:

In violet glass: Powder: 200 g and 500 g  
PZN 200 g: 10013765 & PZN 500 g: 10013771

### Shelf life: At least 2 years

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