



The BIOWASHBALL ceramics

This ceramics contain TM micro organisms, and have the ability to restructure water beneficially. We have never been able to understand fully how micro organisms can survive the 1,000 up to 1,300°C firing temperatures generated while producing ceramics. It is highly improbable that other species could survive at such high temperatures, but the existence of these photosynthetic organisms is essential to partly understand the importance and the incredible role of the TM organisms. These organisms were first discovered in Japan and given the “EM - Effective Micro organisms” denomination. Thereafter, South Korea developed this technology further and gave the TM name “Total Effective Micro organisms”, combining the ground/soils fermentation effects to increase the micro organism’s capabilities. Essentially, three bacteria’s make up the composition of these micro organisms:

A. Photosynthetic Bacteria

These bacteria synthesize substances coming from roots, organic matter and gases (especially hydrogen sulfite) by using light from the sun and heat from the ground. The beneficial substances thus produced by these bacteria include, amongst others, amino acids, nucleic acids, bioactive substances & sugars. The metabolites produced by these micro organisms are absorbed directly by plants.

B. Lactic Acid Bacteria

These bacteria produce lactic acid from sugars and other carbohydrates coming from the photosynthetic bacteria and the yeasts. Some foods (such as yoghurts) are produced from these bacteria for many decades. However, lactic acid has a very important sterilization effect; it destroys undesirable micro organisms and triggers fermentation. Furthermore, lactic acid insures the decomposition of matter such as lignite & cellulose and also triggers their fermentation, thus canceling the undesirable effects of possible non decomposed organic materials

B. The Yeasts

The yeasts synthesize antimicrobial substances as well as other substances necessary to plant growth from amino acids, sugar products from photosynthetic bacteria & plant roots. Bioactive substances such as hormones & enzymes produced by yeasts will improve cells activity and cell dividing.

Ceramics which contain TM and TM-x’s can and will transfer beneficial effects & energies to water and/or to other substances in which they are added (concrete, plaster, compost, animal waste), and thus make for a more beneficial local environment :

- 1) It improves the structure of water
- 2) It imparts other beneficial energies & effects to water
- 3) It discourages growth of unfriendly organisms

The presence of photosynthetic bacteria explains why the BIOWASHBALL needs to be exposed to the sun in order to “regenerate”. As it is most of the time the case with associating minerals, the effects of each ceramic is enhanced by the presence of one or several others. All the basic components of these ceramics are entirely natural products extracted from the ground.

	<p>TM-C M Ceramic TM-C M ceramic improve the water emulsification, permeation, dispersion, and solubility abilities. They modify the pH of water to reduce alkalinity.</p>
	<p>TM-C R Ceramic Water molecules in contact with TM-C R ceramics have a high antioxidant activity and prevent water molecules from breaking down into 2 kinds of ions (H+ and OH-). Normal tap water treated with this ceramics turns into water with a low oxidation-reduction potential and becomes a strong non oxidizing agent. This phenomenon decreases and/or removes hazards induced by free radicals.</p>

	<p>TM-C EL Ceramic TM-C EL ceramic radiates far infrared rays within wave lengths closest to the one favorable to the human body.</p>
	<p>TM-C J Ceramic TM-C EL ceramic radiates far infrared rays within wave lengths closest to the one favorable to the human body and reduce the oxidation effects of water. They also help water to enhance the metabolism of the human body.</p>
	<p>TM-C pH Ceramic TM-C pH ceramics controls the pH of treated water by reducing alkalinity stabilize the pH. The abundance of ions released from the ceramics allows the water to keep a low alkaline level.</p>
	<p>TM-C K Ceramic This ceramics protect water from bacterial & microbial contamination. The far infrared rays radiating from this ceramics make water molecules clusters much smaller. Because water passing through or contacting this ceramic possesses strong surface tension, toxic ions are bound tightly by this treated water and become harmless.</p>
	<p>Activated Carbon CALGON-made (made in USA) activated carbon is effectively able to remove harmful organic substances as well as mold, odor and others.</p>
	<p>TM-C Z Ceramic This ceramic mainly protects water from microbial or bacterial contamination.</p>

FAQ Biowashball

Question: What can I use together with my Biowashball to add a perfume to my laundry?

Answer: You can add a few drops of essential oil on a handkerchief and wash it together with your laundry. It will add a nice and natural perfume to your laundry and avoid adding a chemical product or perfume.

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Question: Can I use a small quantity of my traditional washing powder together with my Biowashball without damaging it?

Answer: For very dirty laundry, it is recommended to add 1/5 of the usual amount of washing powder (of ecological quality by preference). The natural ceramic components inside the Biowashball do not "match" very well with chemical products.

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Question: I have a washing machine which does not have the selection of 50°C, can I replace it with a cycle of 60°C ?

Answer: It is not necessary to wash in temperatures above 50°C because the advantage of the Biowashball is that the ceramic components are very efficient in water with low temperature, which is both ecological and economical.

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Question: In the region where I live, the water contains a high quantity of limestone. Can I use a decalcifying product together with my Biowashball?

Answer: It is not recommended to use a chemical product together with the Biowashball and we recommend rather an ecological or natural product, such as the magnetic balls (Cal'CareBall) which is a good ecological alternative to a chemical product. The Cal'CareBall consists of magnets and the magnetic field will crystallize the lime particles in the water and modify their structure. The lime particles will lose their capacity of adhesion under the impact of the magnetic field.

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Question : Can I use my Biowashball together with a fabric softener?

Answer: It is not necessary to use a fabric softener together with the Biowashball. The ceramic components will contribute to the preservation of the elasticity of the fabrics during the washing cycle. If you still want to add a fabric softener, we recommend to choose an ecological product.

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FAQ Biowashball

Question: Isn't there a risk that the small spikes on the Biowashball, when rubbing the linen, will damage or wear out the linen more quickly?

Answer: The Biowashball does not damage the linen or fabrics if it is used according to the user instructions in a washing machine while respecting the maximum capacity. 1 Biowashball is recommended for a machine with a capacity of 4 kg and above 4 kg, it is recommended to use 2 units of Biowashball. If you still wish to take a maximum of precaution when you wash a small quantity of linen or delicate linen, you can for example put the Biowashball in a wash glove.

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Question: Can I use a stain remover together with my Biowashball or will it have a negative impact on the ceramic components?

Answer: We recommend using an ecological stain remover or a natural product such as an Alun stone to rub the stains and/or to soak the laundry for 1 hour with Biowashball before washing. For very dirty laundry, it is recommended to add 1/5 of the usual amount of washing powder (of ecological quality by preference).

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