# 1: Far Infrared Ball ( Red color / High contents yellow color )



Far infrared ceramic ball is the special ceramic materials that can radiate specific wave infrared ray. It is made of variety natural mineral such as tourmaline, far infrared powder, kaolin etc. It is sintered by 1200 Degree C and become the Far infrared energy ceramic ball.

Far infrared ceramic ball can improve the balancing of blood pressure and blood sugar, increase oxygen and nutrient in your cells. As a result, this far infrared ray ceramic ball can increase muscle strength, vitality and mental stability. Natural wavelengths of far infrared light are essential for bone growth as well as preventing osteoporosis, regulating hormonal functions and boosting your immune system.

Long-term drinking water filtrated by far infrared ray ceramic ball (far infrared ceramic ball), we can not only gain zinc, lithium, iodine, selenium and other trace elements that our bodies need, but also regulate organisms microcirculation and improve the body's immune capacity.

The emission rate of far infrared ceramic ball can reach more than 90%, more than 20 kinds of trace elements necessary for the human body. It will slowly and evenly release more useful minerals for water.

### **Main Ingredients**:

Tourmaline: 25~30%

Far infrared powder: 25~30% Porcelain clay: 10~15% High grade clay: 15~20% Others: about 10%

## **Advantages:**

- (1).generates negative ions
- (2).the electrolysis of water
- (3). reducing water molecular beam
- (4). the radiation far infrared (4-14 microns growth rays)
- (5).contains valid trace minerals

## **Functions & Features:**

Radiance of far infrared ray (the wavelength is 4~20µm) : ≥0.85

Amount of generating negative ions: 250~400p/s.cm3

PH of soaking water solution: 8.0~9.5

Insoluble, gradually releasing mineral substance

## Packing & Storage:

25kg per bag+Jumbo bag

Keep from raining, and avoid moisture. Stored in dry place.

#### **Use Instruction:**

Should wash with clean water for two times in advance, then can be directly used for drinking water treatment.

#### **Application:**

Far infrared ceramic ball is mainly used for various types of water purification, drinking water and water treatment. This far infrared ceramic ball can be installed in water dispenser to improve the taste of water. It is a new type of environmental protection products.

# 2: Negative Ion Ceramic Ball:



Negative ion ceramic ball is mainly made of the natural nonmetal mineral tourmaline, far infrared powder, kaolin and high-grade clay by nanometer comminution technology, special formula and agglomeration techniques. It emits far-infrared ray and negative ion which are good to the human body, Amount of generating negative ions: 1500~2000p/s.cm3, 3000~5000p/s.cm3,more than5000p/s.cm3.

It has the function of deodorization, self-purification, blood circulation promotion, biological activation and pain relief. Its far-infrared ray and negative ion is emitted with fine vibration of piezo electric unlike other negative ion products. This makes the environment fresher by eliminating the anxiousness of harmful electric waves.

#### Features:

- Discharge High Capacity of Negative Ion more than 1500p/s .cm3.
- Natural Healing Ability & Increase Immunity
- Emits of High Far Infrared Radiations
- Emit a lot of Negative ion for human health
- Insoluble, gradually releasing mineral substance

## Application:

- 1. By adding this anion ceramic ball in drinking water, the water can kill bacteria, increase dissolved oxygen and activate water. It can also be used for water heaters in bathrooms to make oxygen-rich water and increase air negative ion concentration.
- 2. For various types of water purifier, drinking water dispenser and water supply system and equipment, agriculture and industry, health care products etc.
- 3. Owning smooth surface without dust, it can be used for room decoration to change the air quality, increase the negative ion content and prevent the air conditioning disease and the computer syndrome.
- 4. This kind of anion ceramic ball can be used in cars to eliminate the car smell and clean the air.

# 3: Maifan Stone Ceramic Ball / Maifan stone granular:



Maifan stone is produced from porphyritic pea gravel in the valley, named maifan stone because of its appearance is similar to rice. It is a kind of mineral health healing stone with biological activity. It can dissolve out 42 kinds of elements including 20 kinds trace elements which human body need and 15 kinds rare earth elements. Maifan stone is earliest natural mineral medicine stone which we applied, it can dissolving out the Potassium Sodium, Magnesium, Silicon, Fierce, Ti, P etc. more than 20 kinds nutrient elements which are necessary for human body. Especially the metasilicic acid content can reach 60mg/L, it is as same as the International Mineral Water Standard. The maifan stone is called as Health stone, Longevity stone.

It can make weak alkaline water, can keep the pH value of water at around 8.5. After testing repeatedly, there is no impurities dissolution powder too. Its effectiveness is very long, it can last 1-2 years. It can dissolving out the trace elements -metasilicic acid and making the metasilicate mineral water accordingly.

Maifan stone has the character such as purifying water quality, increase the biological activity of water, improve the body's physiological function and adjust the pH value by two-way regulating.

If drinking the water that treating by maifan stone for a long time, that can protect liver, invigorating stomach, diuresis, stable and healthy blood pressure, improve blood circulation, preventing sickness, anti-cancer, prolong life, protect skin and beauty face, strong bones, develop brains, promoting growth, stop bleeding and detumescence. It widely used in medical, food and health, environment protection, water quality improvement, beverages, wine, medicine, deodorant, crops, flower cultivation, poultry, aquaculture etc. industries.

The water treated by maifan stone can increase the minerals in the water to active the lon of water, it also can absorb the toxic substances because of pollution. and change the water into the clean active mineral water. Just because of these character of maifan stone, our maifan stone ceramic ball can dissolve out Zinc and Metasilicic acid. their contents can up to the National Standard for drinking water. After the testing of toxicology experiment and radioactive by National Health Department and prove that the Maifan stone ball is painlessness and harmless to human body.

The trace elements and contents that dissolve out by maifan stone ball is as follows:

## Maifan Stone Ball Chemical Contents:

Index	SiO2	Al203	Fe2O3	K20	Na2O	CaO	MgO	MnO	P205	Ge10-6
%	68.24	15.34	3.04	4.12	4.12	2.26	0.89	0.052	0.14	0.68
Index	Pb10-6	Zn10-6	Cr10-6	Cu10-6	Ni10-6	Co10-6	Cd10-6	As10-6	Sr10-6	
%	29	56	15	8.5	8.5	5.8	< 0.5	1.2	454	

#### Main Application Fields Function Application Enhanced physique, Improve the ability of anti hypoxia, Cure the skin purulent infection and scald, Hyperplasia of Medical care mammary glands and dental disease, Alleviate symptoms of cancer and adjuvant therapy etc. food , drinking Maifan stone mineralized water, maifan stone tea, wine, food additives, fresh for vegetables and fruits, refrigerator deodorant, etc. Environmental water purification and wastewater treatment, used for adsorp heavy metal ions, ammonium nitrogen and harmful protection bacteria, water filteration and quality control etc. Farming and cultivation Presoaking seed or spraying on the leaf by maifan stone leach liquor will have the good effect for seed germination. industry root growth, oxygen absorption, development of growth and yield formation. It can improve the production quality for boybean, peanut, milk vetch etc. And can used as the feed additives for animals and fish, also can used as the fertilizer additives etc. Maifan stone ceramics Others

# 4: Germanium Ceramic Ball:



Germanium ball: The contents of Oxygen of Germanium ball is highest than all the minerals which human knows now. It is 5 to 10 times higher than other general mineral stones. The niton emanation that released from Germanium has excellent natural healing capacity. It can anti the root of disease. If use the Germanium ball in long time, it can promote metabolism, blood circulation, Radiation-protective to prevent various disease. It also has the function to beauty skin, chest enlarge and prevent breast disease to woman.

Germanium ball is used widely in Khan steam room, bath mattress, cushion, pillow, shower filter head, waist support etc.

Germanium stone contains selenium, zinc, nickel, cobalt, manganese, calcium etc. more than 30 kinds trace elements which can beneficial to human body. The launch of wave that released by these elements is the same kind wave status with the launch of wave that from body cells. There two kinds wave launch will have the resonance to make body cells tissue has more vigor energy to Promote blood cycle, Enhance the metabolism, and eliminate waste.

Germanium stone can make the life drinking water and natural water into active water. to improve the body's defenses. Meanwhile, Germanium stone can be used as a medicine too, it has the function such as cold blood hemostasis, inverse anti-nausea, calm liver and eliminate fever, also can treat dizziness, giddy, tinnitus etc. caused by high blood pressure.

Germanium also have the function of adjusting abnormal potential for human body to anti cancer. Germanium elements seizure cancer's electronic cells, let its potential drop down to inhibit the disease deterioration.

# 5: Magnetic Ceramic Ball:



Magnetic energy ceramic ball is made of natural magnetic mineral materials(such as tourmaline, maifan stone, muyu stone, energy mineral powder) and other functional materials through high temperature sintering, which uniforms with a permanent magnetic particulate materials. It has a moderate magnetic field strength, broader magnetic field, high eradicate arc of magnetic line of force, etc.

The Earth is a magnetic field, The human are effected by the function and influence from the magnetic field at all times. Under the function of the magnetic field, we build our own magnetic field correspondingly. The human body's heart, liver, lung, brains, muscle and the nervous system all have the micro magnetic field.

#### The Magnetic Ball principle of efficacy:

When water flows through magnetic energy ball, the physical and chemical properties of water will change because of electromagnetic induction in the magnetic field, then the water changes to magnetized water with biological effects.

Atomic structure of magnetized water molecules changes too, the three atoms in water molecule are not in a straight line. Determined by X-ray diffraction method, the structure of water degree angle of each 2 O-H is 104.5. In the water, Oxygen atoms has a greater capacity to attract the electron than hydrogen atoms, one end of oxygen atoms in water molecules has negative charge, the other end of the two hydrogen atoms have positive charge. There indeed has many many changes at the micro physical and chemical characteristics, therefore specific effects created.

At the water magnetization process, the order of the water molecules gradually changes, and breakdown the hydrogen bonds of water molecules, so that the association of water molecules change to single scattered molecules and chemical bond tote short ones which promotes its infiltration and dissolution ability, such water molecule can be easy to penetrate the human body and magnetization water may activate certain enzyme activity and has effective function in promoting the metabolism of nutrients.

**Application:** For various types of water purifier, drinking water dispenser and water supply system and equipment, agriculture and industry, etc.

## Functions:

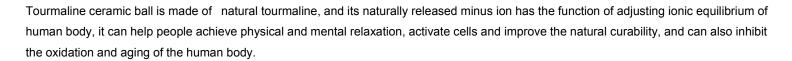
- 1: The water molecular is changed smaller, it is easy to permeate cytomembrane, increase the activity of cell membrane and improve the immune capability.
- 2: Eliminate the abnormal taste, residual chlorine, cancerogenic substance etc. hazardous substance.
- 3: The water quality is weak alkaline pH value, it can help human body to be acid-base balance and nutritional balance.
- 4: It has rich of the calcium, magnesium, potassium, etc. trace elements that human body needs.
- 5: high electric conductivity, the ORP is low, promotes healthy digestion, prevent aging.

# **6: Tourmaline Ceramic Ball:**



#### **Tourmaline Ceramic Ball Functions**

- Increase minerals, increase water pH value and making alkaline water.
  - Make small water molecule by the wave of weak electricity
  - Effect to the emission of far infrared rays & Negative ion
  - Eliminate the peculiar smell of water
  - Rich in calcium, magnesium, sodium, potassium and other trace elements
  - Promoting digestion prevent aging.



The naturally existed electrodes of tourmaline can electrolyze water to obtain the reduction and activation effect of water. water is actually a molecular group that is formed by combination of many water molecules (H2O). Tourmaline can reduce the size of water molecules, so as to facilitate the removal of impurities in water, make the water taste well, and increase the penetration.

Radiation of far infrared ray: far-infrared radiance of tourmaline is above 95%. The far infrared ray with the wavelength of 4-14 micron is called the light of life", which can penetrate into deeper parts of the body, promote blood circulation, and make metabolism smooth.

Tourmaline contains a variety of natural minerals, most of which are essential trace elements. Through the role of natural electrodes of the tourmaline, the minerals dissolved in water can easily be absorbed by the body, and therefore it is the ideal source of trace minerals. Long-term drinking water treated by tourmaline ceramic ball, we can improve the body's resistance to harmful substances and natural cure.

#### **Use Method:**

- 1. Put ceramic ball directly into the water that needs processing for 30 minutes;
- 2. Inlaid into wall body, under the floor, seats or bed when it is applied indoors.
- ${\it 3. Technical Specifications: } \ \, {\it Minus ion amount 1800-2200ions/cm3}$

**Application**: For various types of water purifier, drinking water dispenser and water supply system and equipments, agriculture and industry, etc. For activating, purifying and mineralizing drinking water

# 7: Alkaline Ceramic Ball:



Alkaline ceramic ball is developed on the basis of far infrared ceramic ball, it can breakdown bigger molecule group of water into smaller one to activate water. Eradicate more than 80%~85% FIR (far infrared ray), make water (PH value is 7.5~8.5), antibacterial and release mineral microelements.

Alkaline ceramic ball is the perfect combination of antibacterium and nano-technology, because it is still has very strong sterilization in high temperature conditions, it is the traditional replacement products for the mineralization ball.

Alkaline ceramic ball is modified to add the far infrared ceramic materials of the traditional activity ball. Far infrared ceramic material has emission of more than 90 percent rate at room temperature. It has function of high far infrared emission rate and strong water absorption, this product is rich in 20 kinds of trace elements necessary for the human body, such as zinc, lithium, iodine, selenium, and so on these trace elements are slowly released in purified water, making the activated water contain more useful minerals.

#### **Functions**

- Make Alkaline water ( PH 7.0 ~ 9.5 )
- Make alkaline & antioxidant good-drinking mineral water
- Emits high capacity of calcium (Ca) mineral (Enhance the bone regeneration)
- Remove bad smell in water and make sweet taste water

#### Life time

- Usage: Water filter: 100g~150g
- Effective water volume: 6-8m3 (6000-8000 liter)
- Standard usage: use 0.03m3 (30 liter) per day, lifetime will be 6-9 months.

## **Application**

- Water purifier
- Water Treatment(Waterworks, Sewerage)
- Antioxidant Alkaline Purifier

#### **General Packing**

25kg/box

# 8: Antibacterial Ceramic Ball:



Antibacterial ball is made of nano silver antibacterial agent, tourmaline, Maifan stone, kaolin, clay etc. mineral materials by high temperature sintering.

The features of antibacterial ball is the broad-spectrum antibacterial and long-lasting efficient. It can effectively inhibit the water's sticky, discoloration and deterioration etc. because of the growth of bacteria and microorganism. The antibacterial ball can used in the water purifier filter, humidifier etc.

Silver is the best antibacterial agent in natural antibacterial materials. It is easy to forming the water layer. The silver ions can be released into the water layer. Bacterial's cell membrane's composition is Phospholipid molecules and proteins, the phosphate radical of Phospholipid molecules is with negative charge that let the antibacterial's cell is with the negative charge too. So the silver ion that with positive charge can quickly contact the cell membrane and protein and cause the changement of its structure and at same time causing damage accordingly. Besides, Ag+ can also attract strongly the sulphydryl of body enzymes, and combine it quickly to let the enzymes lost its activity to cause the bacterial dead. When the Enzymes lost its activity and bacteria dead, Ag+ will be released again from bacterial body and contact other bacterial and repeat the antibacterial process again. So it can kill the bacterial again and again.

\*Antibacterium strongly: The antibacterial ball can kill more than 650 kinds bacteria within minutes. Because of its bactericidal principle, it can kill the bacteria very quickly.

\*Broad spectrum antibacterial: This ball can kill most of bacteria, fungal, molds, spore etc. microorganism. it can inhabited and killing the escherichia colic, pseudomonas aeruginosa, candida albicans, staphylococcus aureoles etc. more than twenty kinds of pathogenic microorganism. It has the same effective for antibiotic resistant bacteria.

\* It is without any toxicity and side effects for human body.

#### **Specifications:**

Ag: >0.2-0.5%,

Maifan Stone: 50~60% Zinc oxide: about 2.0%,

Kaolin: 12~16%

Far infrared powder: 10%,

Clay : 20~30% Others: 5~8%

## Functions:

Resisting and killing golden staphylococcus≥90%

Resisting and killing colibacillus ≥90%

Amount of generating negative ions: 150~300p/s.cm3

PH of soaking water solution: 7.2~8.0

Insoluble, gradually releasing mineral substance

**Application**: For various types of water purifier, drinking water dispenser and water supply system and equipments, agriculture and industry, health care products etc.

# 9: Natural Mineral Ceramic Ball

(can produce the ball of blue color, yellow color, black color, white color, grey color, green color etc. as per request).



**Natural mineral ceramic ball** is made of high quality tourmaline stone, clay and multi-functional health ceramic material for composite processing. Now it has become a high-tech health ceramic product. This ceramic ball is mainly made of the natural nonmetal mineral tourmaline adopting nanometer technology, special formula and agglomeration techniques. This energy ceramic ball is also used for activating, purifying and mineralizing water. It can remove the chlorine of the running water, and further change the acidity of water.

In water, the mineral ball supplement potassium, sodium, calcium, magnesium, phosphorus, iron and zinc elements, selenium, copper, strontium, iodine, fluorine, silicic acid and other eighteen kinds of trace elements, which are necessary for the human body. it contains a variety of essential trace elements, that can be used for water purification, sewage treatment, and the bacteria with strong adsorption. It can also adjust organism microcirculation and improve human immunity. This energy ceramic ball has health care function.

Meanwhile, this Mineral ball as a mixed compound of many kind of natural minerals powder, it is used as a multifuctional ball with high generation of far infra-red rays(F.I.R) which is an energy for activation of living body and rotational electromagnetic waves(- ray), helps human metabolism and increase immunity,

#### **Features**

- make small water molecular structure by the wave of weak electricity and increase natural minerals.
- effect to the emission of far infrared rays and weak negative ion.
- make excellent activated water. Make alkaline & antioxidant good-drinking mineral water
- Emits high capacity of calcium (Ca) mineral (Enhance the bone regeneration)
- Remove bad smell in water and make sweet taste water

#### Application:

- 1: Mineral ceramic ball can be used for new water factory, water plant, water treatment plant development of new antibacterial, activation, adsorption and filter water purification products.
- 2: Mineral ceramic ball can produce weak alkaline water.
- 3: This natural mineral ceramic ball can produce anion. It can contribute to the human body synthesis and storage of vitamins, strengthen and activate the physiological activities of the human body. It is even called the "air vitamin". Regarded as vitamin products, it has a very important impact on the human body and other biological life activity.
- 4. Mineral ceramic ball can produce small water molecules.
- 5. It can release the far infrared rays.
- 6: The ceramic ball is used in the water processing industry, such as aquatic animals box, water decontamination, farm crop to spray water, air to purify and sauna bath, hydrotherapy health care, and so on.

10: Dechlorination Ceramic Ball (calcium sulfite ceramic ball)



Dechlorination Ceramic Ball also name as Calcium Sulfite Remove Chlorine Ball & Remove Chlorine Ceramic Ball. It can great improve the taste of water. Now it is widely used for high-class water treatment system.

Dechlorination balls are formulated with CaSO<sub>3</sub> and all natural minerals to naturally purify and revitalize your water, which are heated to temperatures over 800 °C in the stove for more than 10 hours.Balls should efficiently remove the residual chlorine compounds, free residual chlorine, hypochlorous acid and hypochlorite ions. Also balls should inhibit the growth of bacteria, improve the content of dissolved oxygen, adsorb harmful heavy metals, clean and mineralized water quality, adjust the PH value of water.

The dechlorination ball is produced by using high pure CaSO3, Its main function and working principle is as below:

- Excellent efficiency of remove residual chlorine in water.
- Diminution of bad smell, bad taste, impurities, organic matter.
- -The product is pure natural, pollution-free, antibacterial.

Dechlorination Principle: ----- CaSO3+2HCIO =CaSO4+CaCl2+H2O

CaSO3:----->>98%

Dechorination rate: ----->99%

Rate of wear and breakage:----: <0.75%

Solubility in hydrochloric acid: ---: < 0.5%

Density----:: 1.35~1.40g/cm3

Bulk Density ----::0.75~0.78g/cm3

Porosity in particle----:20%

Porosity in bulk-----:39%

Compressive strength----:>40N

filter speed----::10~18m/h

Treatment of 400L drinking water--: 99% (5g)

CaSO2.2H2O dissolving----:0.02mg/L

#### **Main functions:**

• Remove residual chlorine;Including chemical sexual residual chlorine and free residual chlorine CIO - (hypochlorous acid ions), HOCI (hypochlorous acid), CI2 (chlorine), etc. Making the chlorine in the tap water become into harmless elements for human body.

- Adsorption impurities in the water;
- It is a kind of efficient, safe, high temperature resistant, not produce bacterium of the ball;
- Compared with the KDF copper zinc alloy, lower production cost, remove chlorine more effective.
- The product is pure natural, pollution-free, antibacterial, antifungal, no static. Compared with the conventional activated carbon addition to residual chlorine, calcium sulfite addition to residual chlorine are efficient, safe, heat-resistant, bacteria and other advantages, in addition to more effective chloride. Purified, mineralized water, adjust the PH value of water.

# 11: Magnesium ORP Ball for hydrogen water / kangen water:



Negative potential magnesium orp ball (Oxidation-Reduction Potential ball ) is made after purification, smelting, calcining, polishing etc. more than dozens of procedure from special mineral of natural ecology. It is with the characteristic of weak alkaline, negative potential, reducibility etc. low dissolution and high safety. Magnesium Orp ball enhance the stability of performance of Magnesium. In the water treatment application, the ball could increase the pH of water in the same time offer the water rich of hydration and low ORP level.

The orp ball produce rich hydrogen water. Rich hydrogen water is the natural antioxidant without any side-effect, it can remove harmful free radicals of human body, improve hypertensive and diabetes, strengthen the detoxification function of liver and kidney, improve sub-healthy, inhibit cancer, beautify and anti-aging, diminish inflammation, repair the damaged cells, and reinforce the memory ability.

The orp ball is polished and processed to be the orp ball for water treatment. The color is silver white, melting temperature is 650 C, boiling point 1107C, light weight of density 1.74g/cm3. It is strong activity and the oxygen affinity is large, it is usually used as reductant.

Test proved that negative potential ball will breakdown water molecules soon, release - OH ion, which made water negative potential dropped from +200 mv to 0 mv ~-500mv, adjusted PH value to about 7.5, and many air bubbles produced oxygen-rich water when this ball soaked in the water.

PH value of 7.5 to 9.5

ORP value is - 500 mv

Mg: 99.99%

other single impurities: <0.01%

**Work Principle**: Magnesium + H2O will produce the bubble that is hydrogen to making the negative potential alkaline water. At same time, the magnesium has the reaction with water and produce the Mg (OH)2. The reaction formula is Mg+H2O= Hydrogen+Mg(OH)2. The Mg(OH)2 will continue react with water and produce the Magnesium Ion that is the major element for human body.

#### **Function**

- 1: The PH value of Negative potential water is alkaline, It is easy to balance the lactic acid because of body tired
- 2. The contents of calcium and magnesium ions of Negative potential water is higher, this is the health element for body.
- 3. Due to the solubility of negative potential water is very high,osmotic is very strong, it has the emulsifying capacity to body grease. So it is good for relief symptom of high-cholesterol, hyperlipidemia and high blood viscosity which from high protein high calorie diet.
- 4: The negative potential water (ORP 0~ -500 mv) let your cells have the dynamic and keep health. Can help body to clear the chromate, nitrite, heavy metal and inert metal which are very harmful to the body.
- 5.Negative potential water can control the reproduction of microorganisms including control the reproduction of germ and algae. It can used in farm, oceanarium and swimming pool etc.

Attention: Should wash with clean water for two times before treating water.

**Application:**For various types of water purifier, drinking water dispenser and water supply system and equipments, agriculture and industry, etc. And also used for laundry bag.

# 12: ORP Ceramic Ball (hydrogen water ceramic ball):



The negative potential ceramic balls are made from variety natural minerals, negative potential materials and antibacterial materials, after more than 10 production processing and sintered by low temperature 800 Deg C. This ceramic ball is made by nano coated and micropore interflow technology, it solved other hydrogen-manufacturing materials' weakness such as oxidation-failture and separating precipitates, at same time it is interconnection with water to microelectrolysis tardily, so it is more suitable for application.

The water which treated by the negative potential ceramic ball is rich hydrogen water, its Nuclear magnetic resonance frequency upto 45Hz, the contents of hydrogen can upto 500-800ppb, the negative potential will become from +200MV to 0MV~ -500MV. pH value will upto around 8.5.

The working principle is: The negative potential ceramic ball will microelectrolysis the water and produce OH- and H+.

H2O = H+ +OH- (mircoelectrolysis)

H+ + H+ =H2 (hydrogen ion makes hydrogen)

R2+, R2+, R2+ (all kinds of mineral ions compound and make the water's potential value is changed to negative, the water becomes negative potential water accordingly.)

OH- increasing, the water will have more hydrogen ion, and the hydrogen will release too, the water will become alkaline water .

#### **Function**

- 1: The PH value of Negative potential water is alkaline, It is easy to balance the lactic acid because of body tired
- 2. The contents of calcium and magnesium ions of Negative potential water is higher, this is the health element for body.

- 3. Due to the solubility of negative potential water is very high,osmotic is very strong, it has the emulsifying capacity to body grease. So it is good for relief symptom of high-cholesterol, hyperlipidemia and high blood viscosity which from high protein high calorie diet.
- 4: The negative potential water (ORP 0~ -500 mv) let your cells have the dynamic and keep health. Can help body to clear the chromate, nitrite, heavy metal and inert metal which are very harmful to the body.
- 5. Negative potential water can control the reproduction of microorganisms including control the reproduction of germ and algae. It can used in farm, oceanarium and swimming pool etc.

Attention: Should wash with clean water for two times before treating water.

**Application:**For various types of water purifier, drinking water dispenser and water supply system and equipment, agriculture and industry, etc.

# 13: Selenium Ceramic Ball:



Selenium Ball, Selenium is the one of the microelement whom with special physiological functions for human body. It is called as 'the king of anti-cancer'. Selenium has strong biological activity and it is a very good antioxidant too. It can eliminate body's organic free radicals, adjust the physiological balance. it has many functions such as anti-tumor, anti aging, removing macula and keep beautiful skin, anti-radiation and enhancing immunity etc. If the human body short the Selenium, it easy to cause the body illness such as cardiovascular disease, liver disease, cancel and kashin-beck disease etc.

The Selenium ball we produced is with rich selenium, iodine etc. more than 20 kinds of microelement that human body needs. they are released in the water and let the water has more beneficial minerals.

- 1: Selenium has anti-cancer effect. If human body is short of Selenium, it is susceptible for cancer.
- 2: Selenium has antioxidant function. It can also enhance human immunity.
- 3:It has the function of antagonism for harmful heavy metal. Its easy to cause the heavy metals poisoning symptoms by Lead, Arsenic, Cadmium etc. because of the shortage of Selenium.
- 4:Selenium can adjust the absorption and utilization of Vitamin A, Vitamin C, Vitamin E, Vitamin K. If short Selenium, human is easy to cause myopia, cataract, retinopathy retinal disease, old age diseases such as macular degeneration etc.
- 5: Regulating protein synthesis. If short Selenium, it is easy to malnutrition, chromosome damage etc.
- 6: Selenium can enhance reproductive function. If short Selenium in body, can cause ejaculation blocked, low sperm activity, misshapen, conception rate lower, high incidence of uterine inflammation. etc.

Selenium is a necessary composition of peroxidase in seminal plasma. When the Selenium contents is lower, the peroxidase activity become lower too, it will can not inhibit sperm cell membrane peroxidation. and caused sperm damage, dead sperm increased and activity lower down.

7: Selenium is an essential ingredient of the muscle. If short Selenium, may cause the skeletal muscle atrophy and ashen white stripes, myocardial damage, myocardial cell density changement, lipid increased, calcium deposition, to cause disease.

# 14: Muyu Stone Ball:



Mu yu stone mineralized ball is produced through the process of grinding, screening, forming and high temperature firing. Its the new type filter media materials with the characteristic of high hardness, uniform particles, rich microporous, high porosity and full roundness. Can contact each other by point and have the uniform and proper clearance. Their channel is bend, so its circulation distance is long accordingly, that caused a ideal deposition conditions for impurities. When put the Mu yu stone ball into water, they can adsorb or decompose the free chlorine and impurities, bacterial, organic matter etc. and supply minerals. So muyu stone ball can prevent water corruption and get high quality water.

They are widely used for all kinds of filter pool without valve, single filter pond, multi-layer filter pond, mechanical filter etc. to treat all kinds of industrial water, industrial water, city tap water, pure water, soft water, and also can used as biological filter materials to treat the organic waste-water.

This products is easy to be clean, simple renewable and convenient, it is not easy to jam. Can be used repeatedly.

Muyu stone is a rare medicinal herbs. its characteristic sweet taste and neutral nature, non-toxic, have the function of calm the five internal organs and six hollow organs, Muyu stone contains metasilicic acid, Strontium, Molybdenum, Lithium, Zinc, Selenium, Fe, Fluoride, Manganese etc. more than 10 kinds of trace elements that beneficial to human body.

The Strontium and Selenium during these trace elements is very high, they can anti-cancer, anti-aging, prevent hardening of the arteries and CHD etc.

Strontium is essential trace elements, it is the normal part of bones and teeth.

Fluorine is more important to human physiological than any other element, everybody take in 2.1-3.1 mg fluorine from water and food that its beneficial to control the bacteria breeding in mouth, reduce sugar fermentation, inhibit the formation of lactic acid, has the good curative effect to diabetes.

Iron, zinc, Molybdenum etc. trace elements is indispensable elements to human body. Iron is the important elements to the exchange and transport oxygen in blood, and also its the activator for Enzyme REDOX reaction. they can improve the body's metabolism and enzyme activity. to support the health energy and tonic benefits.

#### Usage Method:

Water treatment: Put the Muyu stone mineral ball into filter, Stainless steel or glass tank.

Wine making: Put proper amount of mineralization ball into the filtering device or storage container.

Plant cultivation: Put proper amount of mineralization ball into the roots of plant, increase the mineral contents of soil, speed up the plants to grow.

Watching Fish application: Put the proper amount ball and sand at the bottom of tank, can improve the disease of fish and water quality of tank environment.

Size: 1-30mm (customized)

# 15: Radium Ball:



Radium energy ceramic balls are formulated with natural tourmaline, germanium natural stone, natural magnetic materials and special composite photo-catalyst material processed into submicron powder, sintered by high-temperature stove. Balls have functions include far infrared therapy, healthy hair keeping, drain toxin and waste out of the body, increase blood oxygen content, boost the immunity, beauty the skin and hair healthy keeping, which are popular to be used in spa, sauna, water cure, stone cure, and so on.

It is composited by variety natural mineral materials, at same time add the radium powder, germanium or magnetic powder in production technology. It is the bath health ceramic ball after high temperature sintering procedure. It can dissolve fat and detoxified, accelerate metabolism, relax aches of neuralgia and neuritis etc

Radium mineral can release the negative ions 1200~3000ions/cc. Radioactivity: 45~142. It can promote blood circulation, stable the blood pressure, increase metabolism etc. and also purity air, electrolysed water, reduce the water molecular beam etc. function.

It has the original function for health care as below:

- 1: Expansion the capillaries, improve blood circulation, promote metabolism, enhance lymph circulation, active cells. Discharge or give regeneration to old cells. Enhance cell energy and activity etc. For example, can remove wrinkle, beautify skin.
- 2: Radium efficacy: radium can dissolve fat detoxification, promote diuresis. Cure gout, improve metabolism, promote cells regeneration, absorb disease, anti-inflammatory etc. effect.
- 3: The function to blood: Do not mind drinking or bath, the radium ball can be activated hematopoietic organs to increasing white blood cells. To lower blood pressure, diastolic blood vessels, reduce blood viscosity.
- 4: The function to nervous system: Radium laser is belong to fat soluble, can thoroughly reach at the end of nerve sheath. It is not only has the effect for the pain of neuralgia neuritis and moderate efficacy but also has the efficacy to chronic arthritis muscle rheumatism.
- 5: The function to endocrine: Radium nition can stimulate the role of the endocrine gland commonly, especially for gonad, it has great vitality such as month amenorrhea for woman, it can be to restore menstruation through bath. For the early aging man, can also inspire their reproductive function and to rejuvenation. So the radium ball also called: Rejuvenation King. Radium niton also can active the intestinal and to treating constipation.

# 16: Lava Rock Ball



Lava-rock ball (also named Volcanics mineral ball) is made by various beneficial natural minerals, it can dissolving out silicon, aluminum, calcium, sodium, magnesium, titanium, manganese, iron, nickel, cobalt, molybdenum and other dozens of major and trace elements those are beneficial to human body health.

lava-rock balls can treat municipal wastewater, environment water in lakes and rivers, organic industrial wastewater, living drainage polluted water, slight-polluted sources water, oil filter etc. It also can be used as water filter media to replace quartz sand, activated carbon, anthracite etc. at same time it also can do the deep treatment for the tail water which are treated by secondary treatment by sewage treatment plant. The water that treated by volcanics mineral ball can be reused after it upto water standard.

## Features of lava-rock ball (Volcanics ball):

## 1: It can produce negative ions:

I: After the lava rock ball is formed, the water molecules in air passes the gap of high polymer film and go into mineral crystals to form a permanent electric field space, the water molecules would be ionized into hydrogen-oxygen ions and oxygen ions ( H2O -> OH- + H+ ).

II: H+ quickly move to the negative electrode of permanent electric field, and then will form H2 and escaping into air (2H+ +2e ->H2).

III: Meantime, OH- is formed H3O2 negative ions with other water molecules. (OH- + H2O -> H3O2-)

IIII: If the air humidity is not Zero, this charge will continuously form H3O2- negative ions. Meanwhile it does not produce toxic substances.

#### 2: Active Water:

Lava rock can active the ions of water (mainly its increasing the oxygen ions contents) and can be released slightly a ray and infrared ray which is good for humans and also good for fish. Meanwhile, the lava rock has the function of disinfection too, it can control the disease effectively in aquarium.

#### 3: Stable water quality:

I: Stable pH value, it can adjust the too acid or too alkaline water to neutral water automatically.

II: Stable mineral contents, lava rock release the mineral elements and absorb impurities of water. It can adjust the function of releasing and absorbing automatically as per the water quality.

# 4: Adsorption,

Lava rock is porous, the surface area is large, can absorb the harmful bacteria and heavy metal ions such as chromium, arsenic etc. and also absorb the residual chlorine in the water.

## 5: Color lure and playing tools:

Color of lava rock is natural, it has the function of color lure to some ornamental fishes such as Lohan fish, Red horse fish, parrot fish, red dragon fish, cichlids etc. Meanwhile, the lava rock is their playing tools.

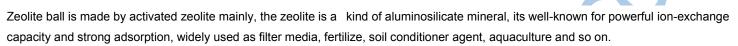
## 6: Promote metabolism:

Lava rock release trace elements that can improve the metabolism of human and animal cells, meanwhile it can take out harmful halide, clean up dirt in the cells. Volcano can also increase the protein synthesis, enhance the immune ability.

- 7: In agricultural production, the lava rock can be used as soilless culture substrate, fertilizer, and animal feed additives.
- 8: Facial oil absorption, beauty skin

# 17: Zeolite Ball:





## Function of Mineral zeolite ceramic stone balls:

1st Function	Soften water
2nd Function	Reduce fluorine content
3rd Function	Removal heavy-metal ions
4th Function	Removal radioactive substances
5th Function	Adsorption ability of organic pollutants
6th Function	Removal ammonia nitrogen content

#### Features:

- 1: Elimination of ammonia in wastewater: To use the zeolite mineral ball for ion exchange, the removal rate of ammonia and nitrogen from water can upto more than 95% after treat by zeolite mineral ball. The removal of ammonia nitrogen is because of its cationics selective exchange capacity and can reproduce characteristics.
- 2.: Soften water: Activate water and make small molecules water
- 3:Reduce the contents of fluorine: It could remove the fluoride from raw water to meet the national drinking water standards.
- 4: Remove heavy metals: The zeolite mineral ball's surface could form negative hydrated oxide coating that is much easier to adsorp heavy metals such as Pb2+, Cd2+, Zn2+, Ni2+, Cr2+ etc.
- 5: Eliminate radioactive substances: The performance of ion exchange from zeolite mineral ball can eliminate the radioactive 137Cs and 90Sr. This mineral ball has the greater exchange capacity and good purifiying effect for these radioactive substances in water.
- 6: Adsorb organic pollutants: The zeolite ball has the features of ion exchange which is easy to adsorb unsaturated and polar organic matters. small molecules polar organic matter, dichloromethane, chloroform, trichloroethane, tetrachloroethane, tribromomethane etc. are its adsorption matters.

# physical and chemicial property of zeolite balls:

property of a second second				
Item	Content			
SiO2(%)	66.45			
Al2O3(%)	12.30			
Fe2O3 (%)	1.49			
MgO(%)	0.92			
CaO(%)	3.97			
Na2O(%)	1.02			

K2O(%)	1.54
TiO2(%)	0.19
РН	9.25
Loss(%)	11.36
Absorption ammonia (mmol/g)	1.86
Absorption potassium(mg/g)	15.03

# 18: Loess ball:



Loess clay ball also named health care ball, is made by the natural loess and plus the rare earth materials. sintered by high temperature. It has the feature of far infrared ray and release the negative ions. The loess contains the nutrient substance that human need. It contains the Se, Mn, Zn, Fe, Mg, P, Ca, Sr, Yb, K etc. more than 30 kinds trace elements that is very good to human body, it could active the enzyme activity, to increase the catalysis of enzymes and improve the metabolic function, promoting digestion and absorption of nutrients, improve the ability of resising disease, promote growth and development, has the high therapeutic effect.

Far Infrared release: 3.5x102 (W/m3.um. 37C) Rate of Far infrared release: 93% (5-20um)

## **Product Functions:**

- 1: Release negative ions: Negative ion have the function of purifying air, anticorrosion and improving sleep quality, it is beneficial to health. It can absorb the harmful substances in the surrounding air, improve the air quality, remove the odor etc.
- 2: Far infrared ray: Loess ball can emit far infrared ray that is beneficial to human body, far infrared emission rate reaches 93%. It has the function of health care in heating room, decorative health care products etc.
- 3: Shielding the electromagnetic radiation: Loess balls have the function of shielding electromagnetic waves. If laying the walls and ground by the loess ball, it could reduce the electromagnetic radiation for human body.
- 4: Antiseptic and mouldroof function: Preventing the perching of fungi and various kinds of bacteria, reducing the harm to the human body.
- 5:Adsorbability: food odor, smoke and other harmful odors could be absorbed quickly by the loess ball.

6:Humidity control: The loess ball could adjust the humidity of the environment and keep the relative humidity of the environment.

7:Loess ball are widely used in mattress, water dispenser, sewage treatment plant, cushion, sofa, pillow, wooden floor etc. which an play the functions of sterilization, deodorization, health care and massage.

# 19: Hollow Quartz Mineral Ball for Aquarium/fish tank



Quartz mineral hollow ball could culture nitrifying bacteria to improve water quality. the micropore of ball iteself has the habitat for nitrifying bacteria. Quartz ball has strong adsorption, it adsorp the pigment, bacteria, harmful metal elements etc. The ions that swimming in water also become the food of quartz ball which adsorption capacity is very high. The water that treatment by quartz ball is named soft water. The quartz ball could adsorb bacterial include E. coli, Staphylococcus aureus.

The quartz ball will cultivat and form a nitration system, can decompose fish's feces and residual feed, improve fish immunity, remove chlorine and heavy metals from water, prevent the breeding of algae. The establishment of nitrifying bacteria in fish tanks depends on the quality of bacteria house used, which is directly related to the clarity and stability of water quality in fish tanks.

## Features:

1: High efficient bacteria culture:

High temperature sintering process. the inside gap is within 10-100 microns. It is very suitable for parasitic for aerobic nitrifying bacteria , anaerobic nitrifying bacteria and other beneficial microorganisms.

2: High density void:

High density voids bring more surface area, there are more than 450M2 surface area per liter quartz ball. that pvoding a good place for the adhesion and reproduction of nitrifying bacteria.

3: Remove harmful substances from water.

Remove the harmful materials inside aquatic animals box such as nitrate, nitrite, ammonia etc.through parasitize nitrification bacterium purify harmful materials while still having adsorption action, the harmful materials can be purified quickly through physics way.

4: Stable water quality: Neutral GP and PH, the effect for water acidity and alkalinity is very low.

## **Functions:**

- 1: Eliminate toxic ammonia nitrogen and nitrite ammonia in water.
- 2: Promote biopurification.
- 3: Large surface area for bacteria implantation.
- 4: Neutral GP and PH, the effect for water acidity and alkalinity is very low.
- 5: Strong adsorption ability can quickly remove harmful substances in water.
- 6: Reasonable and compact structure and do not easy to differentiate, large surface area, its an ideal filter material.

## Advantage:

- 1: Natural ore: Natural materails such as volcanic stone, maifan stone, fluorite, quartz etc. and sintered by high temperature.
- 2: High temperature sintering, strengthen the water activity.
- 3: Good water permeability: the micropores are small and numerous, the surface area is large, and water permeability is extremely strong, increasing the dissolved oxygen in the water.
- 4: Bacteria hotbed: accelerate the nitrification of bacteria and prevent the growth of algae.
- 5: Stable water quality: The water quality is stable and restore the natural clear water quality.
- 6: Long service life: the serive life could be more than 2 years. Its structure is tight and not easy to differentiate.

