

# ***BCS Solutions<sub>cc</sub>***

**BK REG :CK99 / 27621 / 23**

**VAT NO : 4560181911**

## **AGENTS & DISTRIBUTORS FOR: Puresan**

### **Our Vision**

***Green Solutions to protect our Environment and Saving The Planet's Water  
Pioneering the way towards safe clean drinking water, for all people and animals  
Putting the good back in water***



BCS

SOLUTIONS

## PRODUCT RANGE



## **BACKGROUND**

**Throughout Africa, Asia and Central and Southern America, how to provide clean drinking water and ensure hygienic living conditions as well as access to disinfectants and bacteria killing products has been the challenge.**

**In the absence of water treatment systems and sterile clinics the result is either exposure to killer diseases or access to harmful chemicals such as Chlorine, in the attempt to provide sanitary conditions.**



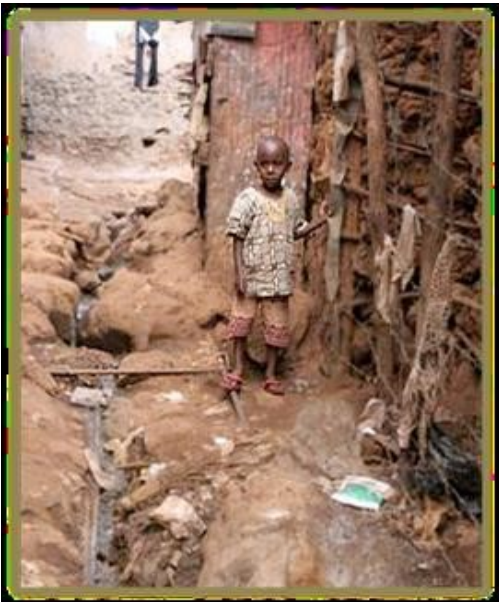
## **COMPANY VISION**

**BCS Solutions primary objective is the provision of a solution to the problem of unclean water thus eliminating the dangers of using contaminated water and in turn ensuring that water used for domestic and industrial use is free of water borne disease forming bacteria, chlorine and harmful chemicals.**

**We are pioneering the way towards people and animals having access to safe clean water for consumption, cleaning, bathing and recreation and product quality, accountability, certification, sustainability and market penetration are vitally important to us.**



## **SOME CONCERNING FACTS**



**Already there is more waste water generated & dispersed today than at any other time in the history of our planet.**

**More than ONE out of SIX people lack access to safe drinking water .... That is 1.1 BILLION PEOPLE**

**More than TWO out of SIX people lack adequate sanitation .... That is 2.6 BILLION PEOPLE**

## **SOME CONCERNING FACTS**



**3,900 CHILDREN DIE EVERY DAY FROM WATER BORNE DISEASES**

**THESE FIGURES REPRESENT ONLY PEOPLE WITH VERY POOR CONDITIONS.  
IN REALITY THESE FIGURES SHOULD BE MUCH HIGHER**

## Our Targets

**Disadvantaged Communities**

**Municipalities**

**Agriculture**

**Lodges**

**Hotels**

**Guesthouses**

**Recreational places**

**Resorts**

**Medical Centres**

**Veterinary Services**

**Wild Life**

**Plus**



# BULK WATER CONTAMINATION

 **PURESAN** **PRO**®

**SANITIZER**

**CONTROLS BACTERIA, ALGAE & FUNGI**







# BULK WATER

**PureSan Pro™**



- ☐ Normally used for Bulk Water Treatment.
- ☐ 1 Litre per 10 000 liters to 500 000 liters of waste water prevents the forming of bacteria and viruses as well as further waterborne diseases.
- ☐ Can be dosed manually or via vacuum based in line system.
- ☐ Water Tank Additive can be directly dosed into water tanks.





# PURESAN PRO®



## What is it?

Puresan Pro® is a natural ionic solution containing among others, zinc, copper and silver.

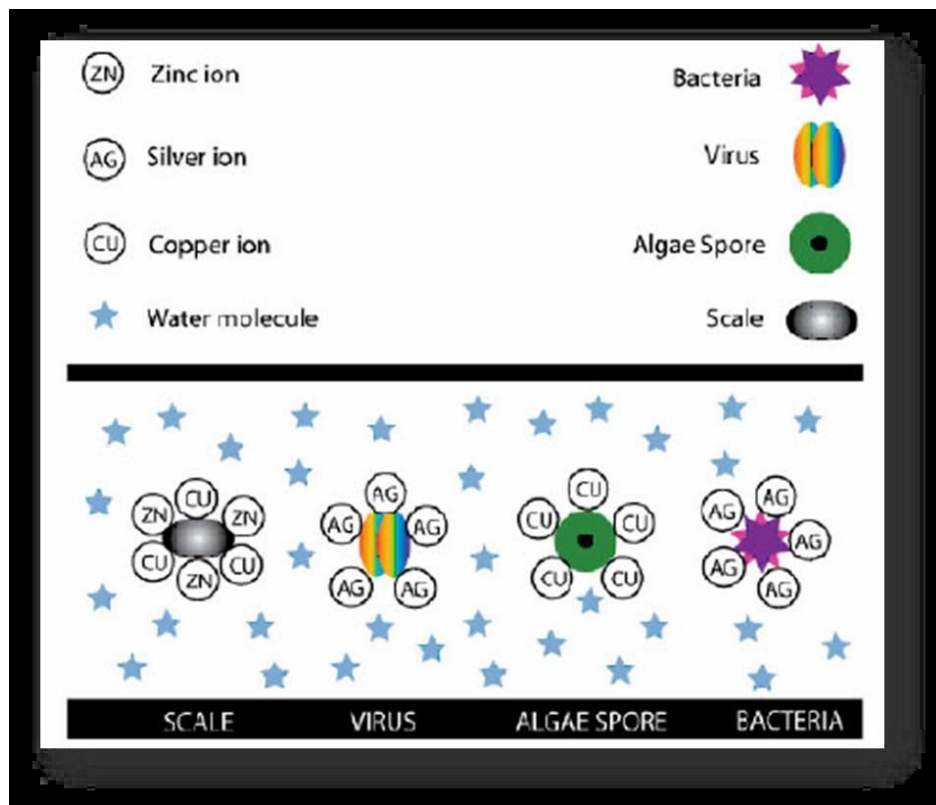
## How does it work?

The algae and bacteria in the water are destroyed through a change in their enzyme processes as the ions break down their DNA structures and cell walls, a result of the microscopic action of these natural mineral ions.



## PURESAN PRO®

How does it work?



**ALL UNWANTED INGREDIENTS IN WATER PRECIPITATE AND ARE REMOVED THROUGH FILTRATION BUT ARE DESTROYED DURING THE ATTACK PROCESS OF THE IONIC SOLUTION**

# **PURESAN PRO®**

## **Benefits and Gains**

- 1. Removes and disinfects the bio film which forms in pipes, canals and water systems, without causing corrosion.**
- 2.Prevents infection of water systems by water borne bacteria such as legionella, Yersinia, shigella, salmonella, cholera and coliform (E-coli) bacteria.**
- 3.Disinfects water systems contaminated by water borne bacteria such as legionella, Yersinia, shigella, salmonella, cholera and coliform (E-coli) bacteria.**



## **PURESAN PRO©**

### **Benefits Continued**

**Reasons to change to the new method of water treatment :**

- 1. Very cost effective water treatment.**
- 2. Low equipment maintenance costs.**
- 3. The knowledge of supplying to the consumer, clean, safe water, 24 hours a day, 365 days per year.**
- 4. A positive impact on individual consumer health due to benefits of Puresan Pro©'s continued effectiveness.**
- 5. HEALTH SERVICES costs should reduce as a result of the improved well being of consumers, notably on gastro intestinal ailments.**



## **PURESAN PRO©**

### **Benefits Continued**

**6. The overdosing of Halogen chemicals, can result in a breach of The Water Supply (Water Quality) Regulations and Private Supply Regulations, however, the effects of overdosing Puresan Pro© are not hazardous.**

**7. Even with low dosages of Puresan Pro© it's active ingredients are still effective.**

**8. Watering gardens with treated water puts micro nutrients required back into the soil.**

**9. Filling pools with treated water means fewer chemicals will be required.**



## **PURESAN PRO®**

### **Benefits Continued**

- 10. The product has a long shelf life and handling and storage of the product is very safe.**
- 11. The product is not temperature sensitive.**
- 12. The product works in a wide pH range.**
- 13. The product (in the diluted form) meets the SANS 241, WHO and EPA drinking water standards.**
- 14. The product has approval in various European countries for water treatment, for example, the Norwegian Department of Health.**



## **PURESAN PRO®**

### **Benefits Continued**

**15. Depending on the quality of the water source being treated, the ratio at which Puresan Pro® is dosed into the water can vary using 1 litre to treat from 75 000 to 500 000 litres.**

**16. Puresan Pro® once in the water continues to be effective in the downstream processes after initial dosing.**

**17. Treatment costs as stipulated by the World Health Organization Guidelines of US 1-2 cents per litre of potable water.**

**18. Also available as a point-of-use application.**

**19. Environmentally Friendly !**





## **PURESAN PRO®**

### **Benefits on Sewerage Plants**

**20. Puresan Pro® continues to work in the downstream system with the following benefits**

**21. Sewerage treatment facilities are less burdened with excess e-coli bacteria and yeasts.**

**22. Elimination of smell in sewerage facilities**

**23. Sewerage transportation systems will be cleaned and less blockages should occur from sludge build up and calcification of pipes and channels**

**24. Elimination of harmful chemicals to be used at sewerage plants.**

**25. Sewerage treatment products available from**



## **PURESAN PRO® BULK WATER DOSAGE AND APPLICATION PROPOSALS**

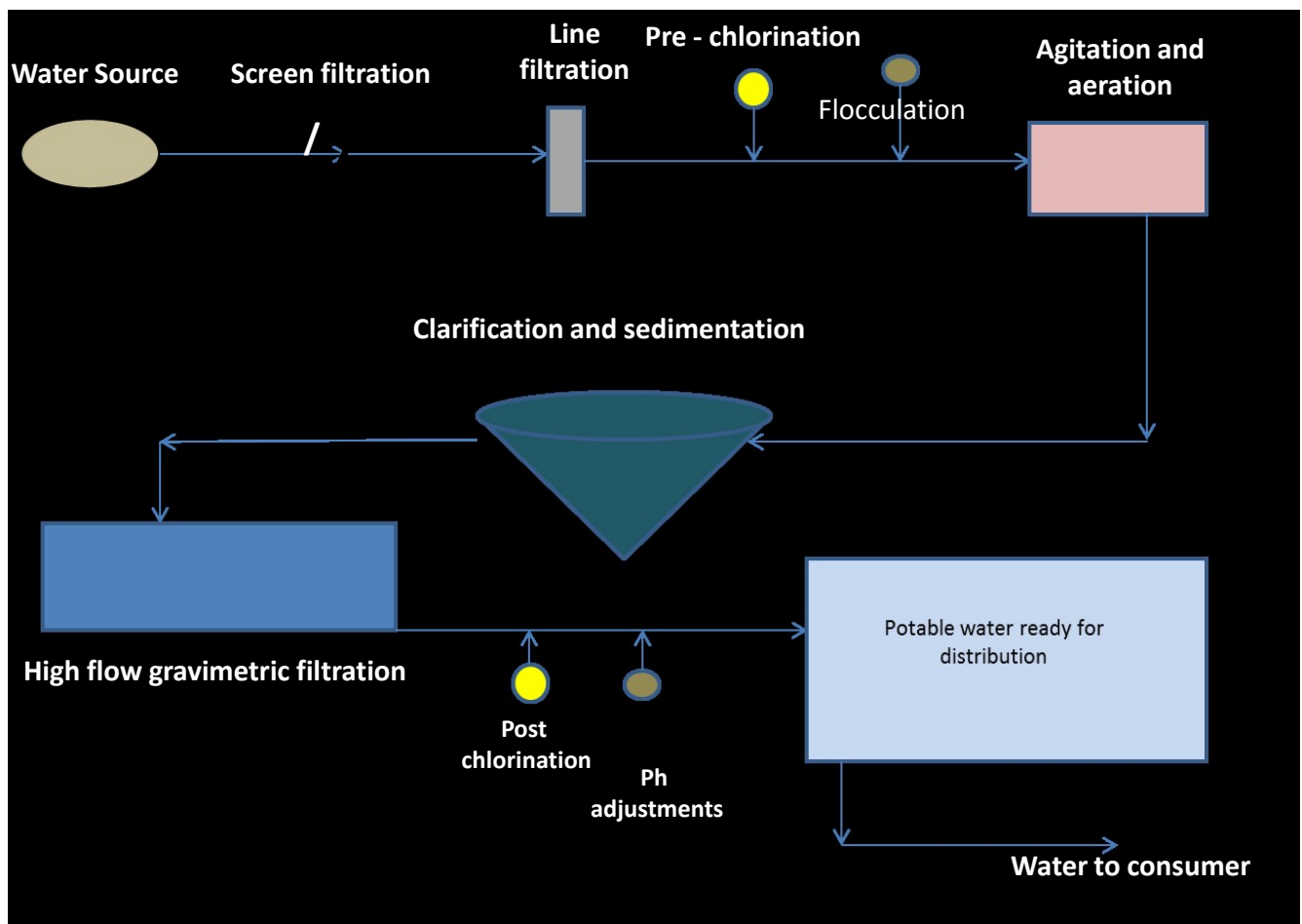
<b>DOSAGE LITRES</b>	<b>WATER SOURCE</b>	<b>WATER TREATED LITRES</b>	<b>COST R/LITRE</b>
<b>1</b>	<b>CLEAN NO INFESTATIONS</b>	<b>750 000</b>	<b>± 0.000314</b>
<b>1</b>	<b>CLEAN NO INFESTATIONS</b>	<b>500 000</b>	<b>± 0.00047</b>
<b>1</b>	<b>RIVER/DAM WITH LOW INFESTATION</b>	<b>200 000</b>	<b>± 0.001175</b>
<b>1</b>	<b>RIVER/DAM WITH MODERATE INFESTATION</b>	<b>175 000</b>	<b>± 0.001343</b>
<b>1</b>	<b>RIVER/DAM WITH HIGH INFESTATION</b>	<b>75 000</b>	<b>± 0.00314</b>

**LESS THAN ZA 1 CENT PER LITRE**



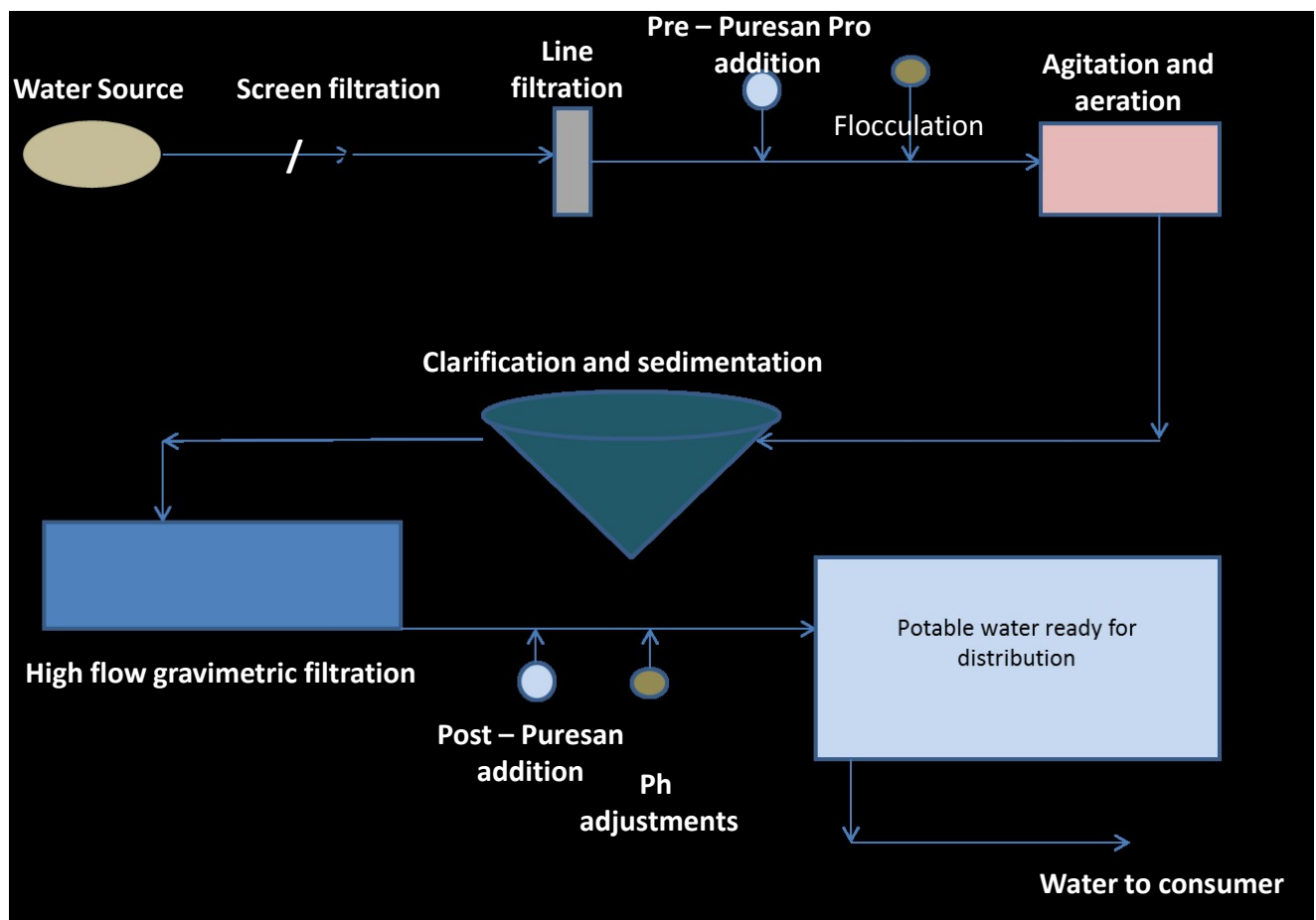
## FLOW DIAGRAM

### Current: Chlorination



## FLOW DIAGRAM

Change: Puresan Pro©









## FOR POINT OF USE

To fulfil BCS Solutions' Mission and Vision as well as assisting the Departments and Municipalities of water supply and control, we have;

- A 7ml Ampoule
- A 30ml Bottle

This is to ensure that the Municipalities and water departments can provide a product to the rural areas that regardless of the water source, the water consumed by less privileged members of these communities is bacteria and virus free, ensuring their rights to clean, pure, safe drinking water.





## **PURESAN PRO©**

**To treat 20 to 25 litres of water, one 7ml ampoule would be required, yielding the same benefits as those afforded a consumer utilising Municipal supplied water.**



**Fill 20 to 25 litre container with any water plus one ampoules and let stand for 30 minutes.  
100% disease free water for drinking and household.**



# Pure Drop™

## PRODUCT SPECS



- Point of Use water treatment
- Kills 100% of all waterborne bacteria, viruses and fungi
- Kills anaerobic bacteria but does not attack aerobic (good) bacteria
- Meets and exceeds WHO and US EPA standards for drinking water
- Meets SANS 241 drinking water specs in dosed form
- 30ml (bottle) treats 450 litres of partially treated tap water or 170 litres of dirty river or borehole water
- Once the water is treated it continues to kill bacteria if re-exposed
- If the treated water is bottled or sealed the shelf life is 12 months
- Has additional therapeutic properties
- Reduces symptoms of gastro related illnesses
- Listed in various EU countries as approved for adding to water for drinking



## BEFORE AND AFTER PUREDROP



***BEFORE:*** Water taken from a small river in Zambia.



***AFTER*** 3 drops of Puredrop in the water.

## **SUCCESSFUL PILOT AT JUKSKEI RIVER**



**Untreated sample water  
E-coli count 390 000 cfu/100ml**



## SUCCESSFUL PILOT AT JUKSKEI RIVER

