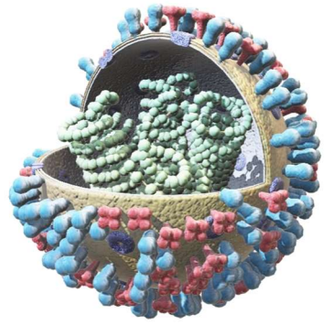
Rubicon-Eco

Bulk Application

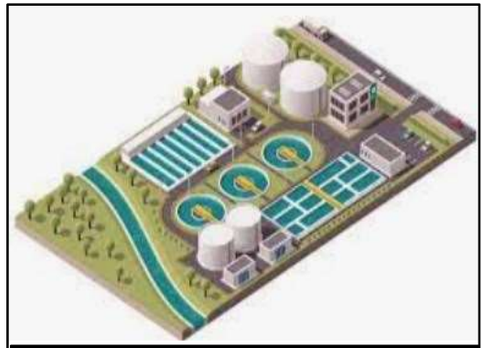
Environmentally friendly safe disinfectant ensuring clean drinking water from highly contaminated water without the formation of any Disinfectant By-Products

Chlorine Free

Provides powerful and effective non-chlorine oxidation for a wide variety of industrial and consumer uses while treatment process meets the requirements of Safety and Environment Protection



Acting as a potent sanitizer against a range of gram+/ gram negative bacteria it destroys spores, bacteria, viruses, fungi, most common pathogen organisms & phenols and combating diarrhoea diseases such as cholera, typhoid fever, E. coli etc.



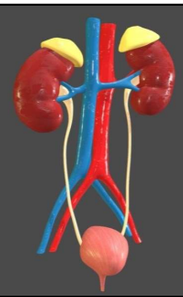
Exhibits excellent disinfectant characteristics for wastewater treatment plants at Municipalities as a substitute for chlorine disinfection

Rubicon-Eco

Odourless: Effective against a broad & complex mix of odours and toxic inorganic compounds

Ensures Clean Drinking Water for prolonged periods of time with the primary decomposed products to be oxygen and water

Tasteless



Eliminates urine precipitate build-up AND Minimises urine odour

Capable of degrading large organic compounds

Rubicon-Eco rapidly reacts with dye chromophores to remove colour and a range of dyes in minutes

Elimination of toxic Arsenic from contaminated soil & groundwater

Rapidly oxidizes cyanide species in industrial waste streams

Rubicon-Eco Target Market

Food Processing Plant

Pulp and Paper Plant

Sewerage Treatment Plants

Municipality Wastewater Treatment Plants

Metallurgy Plant

Textile Industry

Chemical Plants

Rendering Plant

Rubicon-Eco Target Market

Tanneries

Wood Processing Plants

Distilleries

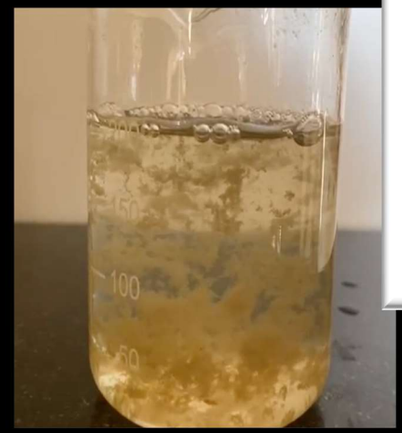
Agricultural

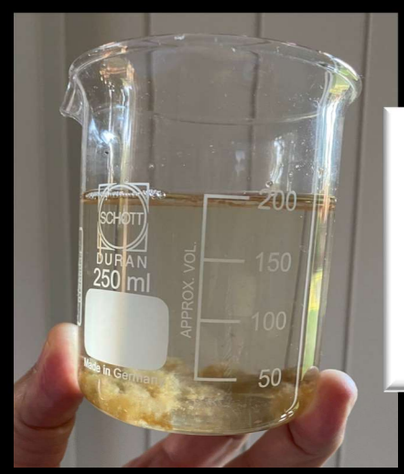
Rubi-Floc

Overview

- Bio-based cationic natural flocculant
- Acts as coagulant, flocculant, & auxiliary flocculation agent
- Broad spectrum of applications with exceptional reduction traits on extremely high turbidity water
- Acts in colloidal systems neutralising charges and creating electric bonds between particles, making them unstable, producing flock and causing their sedimentation
- Does not alter the pH of the water being treated

Untreated Sewerage Water





Immediate Reaction Once Stirring Process Completed

Minutes After Application

Delivered Ready To Use

Is Safe To Store

Is Odourless

Does Not Consist of Any Dangerous Substances

Has No Decomposition Products

Rubi-Floc Target Market

Food Processing Plant

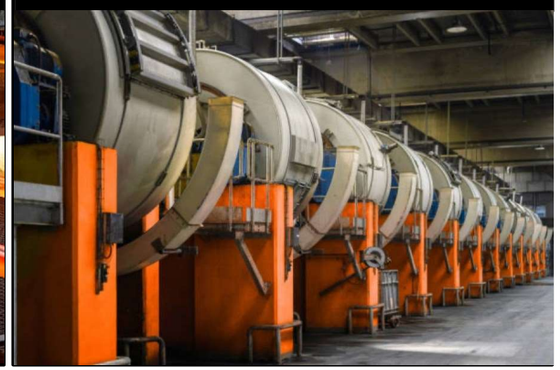
Pulp and Paper Plant

Sewerage Treatment Plants

Municipality Wastewater Treatment Plants

Metallurgy Plant

Tanneries



Chemical Plants

Petrochemical Wastewater

PS-117

During the combustion of coal or in thermal treatment of residual materials and waste, heavy materials contained in the fuel could be emitted into the environment.

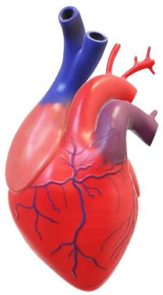
Volatile heavy metals may be present in both liquid effluents and in waste gases, while the non-volatile heavy metals tend to be present in the ash. Because of their toxicity and tendency to bio-accumulate, heavy metals pose a particular risk to man and the environment.

PS117 convert these particularly toxic heavy metals to almost insoluble salts that can be safely separated from flue gas and wet scrubs liquor.

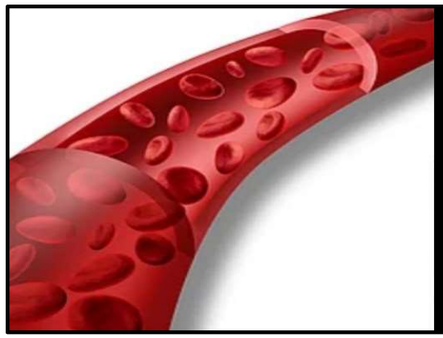
PS117 can be used to precipitate complexed mercury (Hg) and cadmium (Cd), where hydroxide precipitation fails

PS117 is suitable mainly for the precipitation of mono- and bivalent heavy metals such as lead, cadmium, copper, nickel, mercury, silver and thallium.

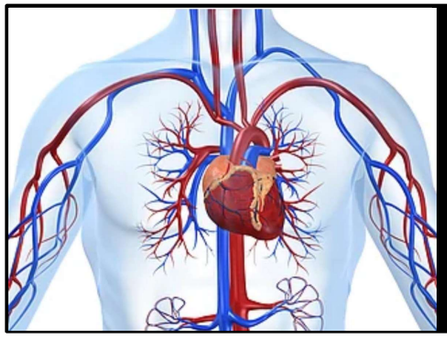
Risk of Heavy Metals to Humans



- Changes in Heart Function
- Increase in Heart Rhythm Problems



- Passage of Particles through Walls of Blood Vessels
- Blood Flow Problems
- Peripheral Vessel Disease/Thrombosis

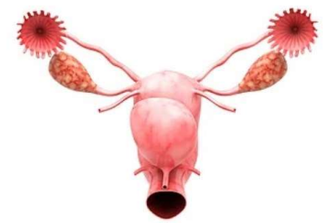


- Atherosclerosis
- Reduction in Diameter of Blood Vessels, High Blood Pressure

- Headache
- Increase in Strokes, Brain ischemia
- Cognitive Disorder
- Neuro-degenerative Illnesses

- Worsening of Chronic Obstructive Pulmonary Disease
- Reduction of lung Function

- Fertility Problems
- Miscarriage
- Fetal Growth Problems
- Premature Birth
- Low Birth Weight

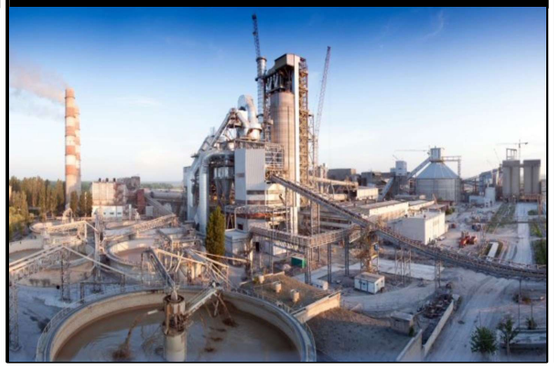


Source: IntechOpen

PS-117 Target Market

Plastic Plants

Concrete Plants



Power Plants

Mines

Wastewater Plants

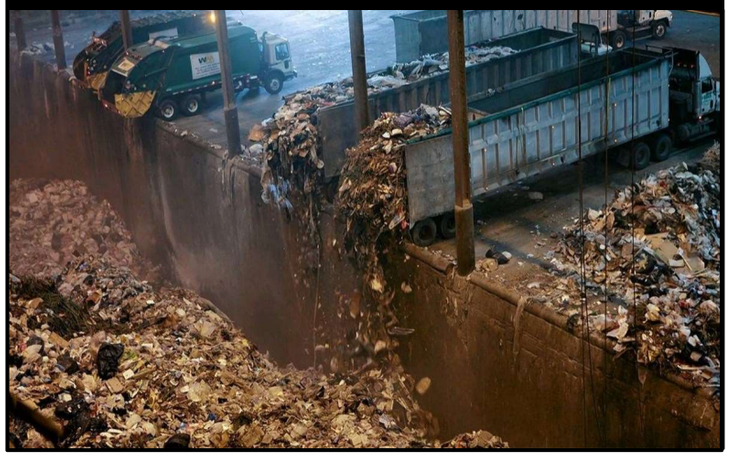
Textile Industry

Chemical Plants

Metal Processing Plants

PS-117 Target Market

Municipal-garbage



Hazardous Waste

Sewerage-sludge incineration plants

EZEMVELO ECO SOLUTIONS

International Accreditations over 15 years of rigorous development and testing

Test Results

World Health Organization

Rubicon-Micro meets WHO performance criteria as a Household Water Treatment Solution and is classified as providing targeted protection against bacteria and viruses

Exceeded pathogenic results by more than 100% for bacteria and 20% for viruses

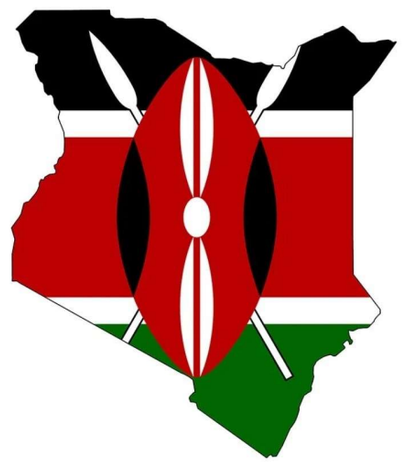
Test Results

Ghana

"the FDA has concluded that the household chemical substance is safe for use… Your application has been approved…"

Ghana

"Disinfect within 20 minutes"



BLOOD:WATER

"Excellent disinfection properties For remote villages and urban cities in Africa"

Test Results

India

"Disinfect within 20 minutes"

सत्यमेव जयते

Ministry of Drinking Water and Sanitation
Government of India

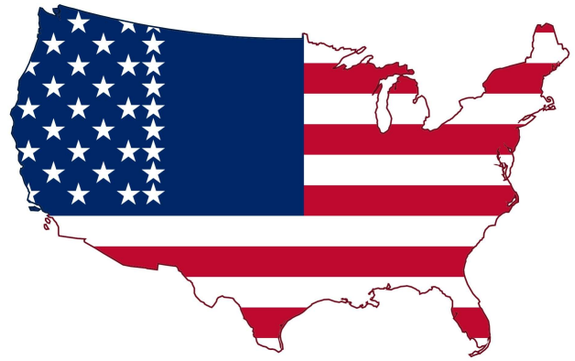
India

"Disinfect within 20 minutes"

TATA

TATA CHEMICALS

USA



"Disinfect within 20 minutes"

NSF®

Independent Certification Organization

Test Results

Japan

"Disinfect within 20 minutes,
Approved very low toxicity"

Bio-safety Research Centre

Japan

"Effective removal within 20 minutes
on arsenic and fluoride"

NOATECH JAPAN

Zimbabwe

APPROVED TO SAZ ZIMBABWE STANDARD

Test Results

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

"Rubicon will not pose unreasonable impact on human health in treatment, disinfecting, of water for cholera"

agriculture, forestry & fisheries
Department:
Agriculture, Forestry and Fisheries
REPUBLIC OF SOUTH AFRICA

Approved: "product does not need to be be registered under the current Act 36 of 1947."

aquatico Scientific (Pty). Ltd.

"The treated water sample thus complies to the SANS 241;2015 guideline for bacteriological content of drinking (potable) water."

science & technology
Department:
Science and Technology
REPUBLIC OF SOUTH AFRICA

wader
WATER TECHNOLOGIES DEMONSTRATION PROGRAMME

WATER RESEARCH COMMISSION

"Product does not require further development and has been tested extensively locally and globally"

Tshwane University of Technology
We empower people

Disinfected within 20 minutes: "0 colonies observed after 20 minutes"

Test Results

DRA PHARMACEUTICALS
synergy in science and nature

"The ingredients used in the formulation are non-chlorine oxidising substances"

Intertek

"Disinfect within 20 minutes"

Eskom

"Disinfect within 20 minutes"

CSIR
our future through science

Council for Scientific and Industrial Research

"It is evident from the results obtained from this experiment that Rubicon Sanitiser is effective in treating water that is contaminated with the spiked micro-organisms at both concentrations of the disinfectant."

"It is evident from the results obtained from this experiment that Rubicon, up to 50mg/l, is effective in treating water that is contaminated with *Vibrio Cholerae*."

Ready to Go to Market

In Country Approvals In Place to go to Market

South Africa

Ghana

Zimbabwe

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