

The Legionnaires' Disease Problem

REGULATORY REFERENCES

INTERNATIONAL GUIDELINES







Legionella and the prevention of legionellosis - World Health Organization 2007

EUROPEAN GUIDELINES

- **The European Guidelines for Control and Prevention of Travel Associated Legionnaires' Disease - vers 1.1 sept 2011**
 - former part I and II "European Legionnaires' Disease Surveillance Network (ELDSNet) Operating Procedures, ECDC Technical Document"
 - former part III "ESGLI/EWGLI Technical Guidelines for the Investigation, Control and Prevention of Travel Associated Legionnaires' Disease"
- **European Manual for Hygiene Standards and Communicable Diseases Surveillance on Passenger Ships. EU SHIPSAN TRAINET, October 2011**

THE BIOPHARMA SOLUTION

LEGIONELLOSIS PREVENTION AND CONTROL PROGRAM

-  RISK ASSESMENT AND REDACTION OF PREVENTION AND CONTROL PROGRAM
-  SAMPLING PLAN FOR THE DETERMINATION OF LEGIONELLA
-  TRAINING FOR PLAN RESPONSIBLES
-  EDUCATION COURSES INCLUSIVE OF "ON JOB TRAINING" FOR MAINTENANCE TECHNICIANS
-  PROCEDURAL PLAN AND SUPPORT FOR REGISTRATION OF THE ACTIVITIES
-  ANNUAL REVIEW OF THE PROGRAM WITH CONSIGNMENT OF IMPLEMENTED DOSSIER

PERIODICAL SANITIZATION

BIOPHARMA products are designed, formulated and manufactured exclusively for water treatment

The Active Ingredients are conform to standard of Art. 95 of Biocide Regulations, other functional components are food grade

Biopharma Products do not contains mineral acids, phosphorus, nitrogen, and metal catalysts

BIOCHLOR (PMC Health. Min. Reg. Nr.19916 Dated 05Th April 2013)

Stabilized solution titrated in Free Chlorine with specific indication for Legionellosis treatment

BIOALPHA

Food grade fruit acids mixture for removal of the inorganic biofilm layer

BIODUE

Stabilized peracetic acid for the oxidation and sanitization of organic fraction of the biofilm

BIOZONO AG+DL

Bio oxidant for legionella treatment in thermal circuits - based on hydrogen peroxide and silver ions

BIOGLAYD



First formulation based on glycolic acid specific for dispensers descaling

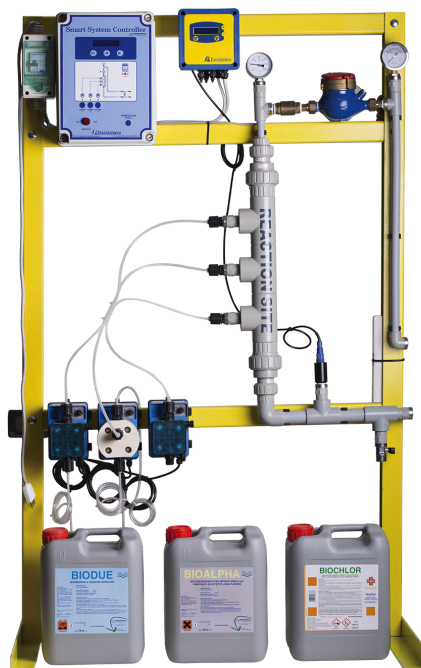
BIOSHIELD

Tannic extract of Grapes; replace polyphosphates in pipe protection by removing excess cations

PREVENTION IN CONTINUOUS PROGRAM DAILY PREVENTION AND LEGIONELLOSIS CONTROL

SMART SYSTEM PERFORM ALTERNATELY

-  CLEANING WITH BIOFILM REMOVAL THROUGH DOSAGE OF PERALPHAHYDROXY ACIDS (XAHA) FORMED IN THE REACTOR FOR PEROXIDATION OF FRUIT ACIDS
-  DISINFECTION WITH STANDARDIZED FREE CHLORINE DOSAGE



IN CONTINUOUS DOSAGE SYSTEM REALIZED ON RESPECT OF HEALTH MIN. DECREE DATED 08th February 2012.

THE DOSING DEVICE IS LEASED UNDER CONTRACT WHICH PROVIDES COMPLETE ASSISTANCE CONCERNING SETTINGS, REPAIRS OR SUBSTITUTIONS.