DYZYME NSIP BIO DISPERSANT FOR COOLING SYSTEMS AND SUBSIDIARIES



## PURPOSES

Water present in the aero-refrigerant towers form a favourable environment for the development of micro-organisms (bacteria, algae and fungus).

In fact, all the necessary factors for rapid development of micro-organisms are pre-sent (at different degrees) :

- Natural light,
- Oxygen (mixing),
- Nutrients (air-scrubbers),
- Water temperature
- (often between 20°C and 30°C),

- Etc ...

The extremely rapid proliferation of living organic matter results in the appearance of sludge, deposit which disturbs the good working order of the installations (motor overheating, decreasing of thermal performance).

Moreover the presence of micro-organisms is often responsible for localised corrosion under deposit (production by their metabolism of corrosive products., ...).

Among bacteria, the most virulent and the most supervised is the legionella pneumophila.

In fact, the inhalation of micro-droplets of water contaminated by this bacteria can cause legionellose to mankind.

The decree of 14 December 2013 (relating to cooling installations by water dispersion in an air-flow subject to authorization or declaration under the heading no 2921) has for objective to limit the risk of legionellose at the source by making sure that at each installation the concentration in legionellose in the water circuit remains inferior to 1000 UFC/L.

It has been demonstrated that biofilm provides good protection for bacteria against any form of aggression, and excessive injections of biocide have not always yielded good results.

To effectively combat Legionella pneumophila, the treatment must be directed towards the TOTAL elimination of the biofilm while minimizing the injection of biocide. To achieve this objective, we recommend the use of our solution.



### **BENEFITS**

#### Contains an organic corrosion inhibitor.

Solution ready to use without prior dilution, that can be injected discontinuously as a curative or preventive shock treatment depending on the objective.

Respect the standards of rejection if used at recommended quantity.

Eliminates the biofilm easily.

### INJECTION

This is a biodispersant product that should be injected in a "shock dose" of 10 to 30 g/m<sup>3</sup> (base dosage).

The effectiveness of the product depends on the contact time and the quality of the water to be treated. A minimum contact time of 3 hours at the prescribed doses is necessary to achieve the total elimination of the biofilm.

It should be used in conjunction with an antiscaling and biocide treatment.

Its use allows for a significant reduction in biocide doses while maintaining effectiveness, thus ensuring the longevity of the installations. In other words, our solution considerably reduces the environmental impact associated with biocides.

The injection point of the product should be chosen to avoid :

- Stagnation of the product after injection, - Preferential pathways,

And any other point that does not allow for nearly total diffusion of the product in the "Cooling Tower" network.

It can be injected continuously at a rate of 10/N to 30/N, where N is the acceptable concentration rate in the Cooling Tower network. Please consult us.

# **HANDLING & STORAGE**

It is recommended to take customary precautions while handling chemicals (gloves, glasses ...).

Consult the Safety Data Sheet (SDS).

The products must be kept away from frost.

CHARACTERISTICS	
Physical	Liquid
Color :	Yellow to orange
Odor :	Slight
рН :	1,3
PACKAGING	

it is available in 20 and 210 kg, non returnable plastic drums.

For any other packaging please contact us.



Note : Do not mix the undiluted product with other chemical compounds without consulting us first.

The information and recommendations contained in this instruction manual are based upon our joint work with our customers and our current knowledge. They are provided merely as an indication and do not constitute an obligation of result. Date : 19/07/2024.

### **ODYSSEE**

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