

# DEWASIL or DINOX 03?

questions and answers regarded the two products

## DINOX 03

- against fusty odour
- fast biofilm-destruction capacity
- compatible with chlorine
- in waters containing ammonia, the product can only be used if there is no chlorine in the water
- for reservoirs, Dinox 03 must be added after the reservoir. Chlorine must be added to the reservoir as Dinox 03 decomposes on the open water surface.
- to remove spores, fungi it is more powerful than Dewasil
- for closed pipelines

## DEWASIL

- in reservoirs, open water surfaces
- ensures persistent high concentration in the network
- no chlorine in water
- can be used in waters containing ammonia
- can be used in waters containing nitrite/nitrate
- for extremely long pipelines.
- for transitional periods (e.g. after chlorine use throughout a year to remove chlorine-resistant microorganisms).
- due to its silver content it kills the most microorganisms

## QUESTIONS RELATED TO MEASUREMENT

If it is not separately mentioned, the answer applies to both products.

### What is measured?

**DINOX 03:** chlorine-dioxide, recommended level 0.2 mg/l. If the value at the endpoint is minimum 0.01 mg/l the effect is ensured at that point too. Maximum value at the endpoint: 0.4 mg/l

**DEWASIL:** hydrogen-peroxide, recommended level 17 mg/l.

### How is it measured?

**DINOX 03:** chlorine-dioxide test-strip or colorimetric tester. In case of DPD method in the presence of free-active chlorine or combined chlorine the use of GLYCINE reagent is needed.

**DEWASIL:** Dewan-50 test strip or DEWAN-50 tester

### How often should we take a measurement?

Frequency is the same as the measurement frequency of free active chlorine concentration during chlorine disinfection. The most important aim is to have bacteria-free water. At the beginning of application it is recommended to take measurements more frequently (1-2 measurements per day during a 4 weeks period) later 1 measurement per week is sufficient.

### Do we need accredited measurement of the chemical concentration?

Accredited measurement is only needed to define bacteria level in the water. The required chemical level must be well adjusted to ensure negative bacteria results.

### QUESTIONS RELATED TO DOSAGE:

#### Q: Where should the product be dosed?

A: After all the water treatment. Generally, dosage occurs at the same point where chlorine were added.

#### Q: Does the length of the pipeline influence the quantity to be added?

A: In case it is a closed pipeline: it does not. A check at the endpoint is needed.

### QUESTIONS RELATED TO APPLICATION:

#### Q: Can the above mentioned products be used on their own, or chlorine needs to be added anyway?

A: DINOX 03: can be used on its own and also as a supplementary disinfectant.

A: DEWASIL: can only be used on its own, the presence of chlorine is not allowed as the two product extinguish each other's effect.

#### Q: Can the products be used in biological ammonia removal?

A: After the treatment location: yes.

#### Q: Can the products work in case there is a 800-1000 m3 temporary storage pool? Is there a slower/faster degradation? Can the products be added to the tank?

A: DEWASIL can be used, in accordance with the drinking water limits. Dinox 03 can only be used after, in the system.

#### Q: When is the use of products contraindicated?

A: DINOX 03: in case of open pools, reservoirs as chlorine-dioxide remains in the water only for a short time.

A: DEWASIL: when the system contains copper as hydrogen-peroxide reacts with copper. Particular attention must be paid during such applications!

#### Q: Which product can be used continuously?

A: Both of them. Selection of the appropriate product depends on the problem.

### FURTHER QUESTIONS:

#### Q: What happens to the biofilm that detaches after the filter house?

A: In case a big quantity of biofilm detaches, purification and disinfection of the pipeline is required. In case the biofilm detachment is minor, the chemical level should be increased.

**Q: How can the products be used for pipe networks?**

**A: DINOX O3:** After adding 67 ml/m<sup>3</sup> of product, a contact time of 5-6 hours is required.

**A: DEWASIL:** A total fill-up with 1-3 % solution (10000-30000 mg/l) or a 1/3 fill-up and circulation is required. A contact time overnight is needed.

**Q: Do they have any impact on spores and fungi at the place of consumption?**

**A:** Yes, if the concentration is measurable at the endpoint.

**Q: Can anything be felt during the use of the product in water?**

**A:** They have no odour or taste, Dinox O3 even has a smell reducing effect.

**Q: Is it a problem, if the products flow through an iron or manganese remover?**

**A:** Yes, they have to be added to the water after each treatment step.

**Q: What is storage life of Dinox and Dewasil? How long can the prepared Dinox be stored?**

**A: DINOX O3:** the powder component (A) can be stored without limitations if the storage conditions are appropriate, the liquid component (B) can be stored for one year after the production. After mixing (activation) the prepared Dinox O3 must be used within 1 month.

**A: DEWASIL:** in its original container it preserves its quality for 2 years.

**Q: Why are 2 pcs. of 1 liter 'A' component supplied to Dinox O3 instead of 1 pc. of 2 liter containers?**

**A:** The product is also available in 10 kg containers which need 1pc. of 1 liter 'A' component for the activation.

**Q: Is there an obligation of notification for the use of any of the products according to the regulations?**

**A:** Yes, there is an obligation of chemical safety notification regarding hazardous substances.

**Q: Why „O3” in DINOX O3?**

**A:** Because the concentration of chlorine-dioxide is 3 g/l.