

## Hadex®

### 3 standard dosages for drinking water treatment

#### ① Normal dosage

A normal Hadex dosage is only 1 liter Hadex: 50 m<sup>3</sup> (50,000 liters) of drinking water. This dosage should reduce and prevent growth of bacteria, algae and other micro-organisms. The water to be treated should be clear and of normal quality, meeting the usual public health requirements. This dosage meets the standards laid down by the DSI/DOT/NMD and other maritime authorities.

Hadex contains < 50,000 mg (< 50 gm/dm<sup>3</sup>) active chlorine per liter of product. This results in a theoretical concentration of ± 1 mg/liter total chlorine after addition of 1 liter: 50 m<sup>3</sup>. However, in practice, the free chlorine measurement after dosing will come out at ± 0,5 mg/liter (ppm), dependent on the water quality (organic matter, pH, etc.). An accurate testing kit, complete with instructions, is available.

Hadex should be added regularly to the water. As a rule, it should be added during each bunkering, dependent on the amount of fresh water being bunkered, or every 2 weeks (in areas with a warm climate), up to a maximum of every 4 weeks.

#### ② Extra Dosage

The extra Hadex dosage is 1 liter Hadex: 25 m<sup>3</sup> (25,000 liters) of drinking water. Use this whenever water is of inferior or questionable quality. It can also be applied when the water contains an abnormal amount of floating particulate and filtration is not possible. The presence of particulate can promote bacteria growth; Hadex helps prevent this.

#### ③ High dosage (shock treatment)

High dosage is 1 liter Hadex : 5 m<sup>3</sup> (5,000 liters) of drinking water. This should be applied when treating drinking water under epidemic conditions and/or when the water is suspected of being infected. For example, where people have gastric or intestinal complaints, or after tests have indicated that the water is polluted. This sort of situation is more likely to occur in high-risk, tropical areas. For additional advice, consult a medical expert or your Hadex supplier.

High dosage (shock treatment) should also be used as an initial treatment for the disinfection of tanks and pipelines after repairs or renewals. For details of this treatment, please read the following instructions.

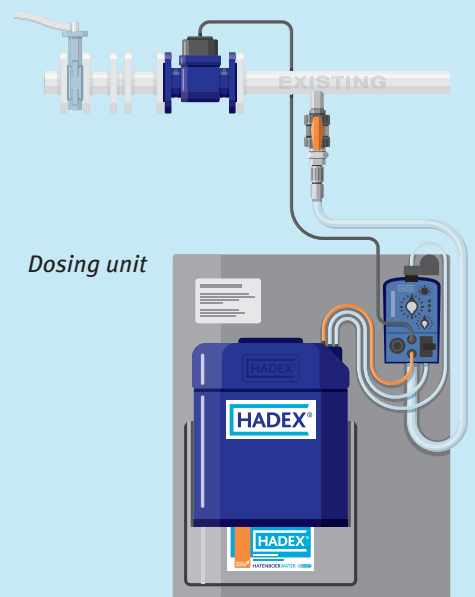
## HADEX®

### Dosing

There are three standard dosages for drinking water treatment in most situations. After the prescribed working time, drinking water treated with Hadex is ready for drinking. Any odor or taste difference occurring will disappear within a few days.

Hadex can be added to the water using the filling pipe (flush afterwards with drinking water) or the tank opening. An automatic and accurate Hadex dosing unit is also available.

Please contact us for any further information about Hadex and/or other drinking water treatment systems.



## Procedure for shock treatment after repairs or renewals

Before the drinking water in a repaired or renewed system is potable, the whole system should be cleaned thoroughly. The coating of an existing tank should be inspected and, when necessary, repaired or renewed.

Allow for sufficient drying out time. Visible contamination should be removed from the tank, after which the tank should be flushed with drinking water, which should subsequently be discharged.

The tank may then be filled with water treated with Hadex (dosage 1 liter Hadex : 5 m<sup>3</sup> drinking water) until the tank starts overflowing.

When necessary, 30 minutes after Hadex dosing leave all drinking water taps open for 15 minutes to ensure that the pipework system has been flushed clean.

After allowing the water to stand in the tank for a minimum of 6 hours, this should be pumped out for disposal; the tank may not be entered after this. The tank may then be filled with fresh drinking water and the normal Hadex dosage should be added (1 liter : 50 m<sup>3</sup>). We recommend a water analysis to be carried out to check the water quality.

## Safety

Hadex may be transported and stored without any special safety precautions. It is classified as 'non-restricted' cargo by IATA and therefore may be transported by normal airfreight. This means that it can be supplied quickly, worldwide.

Hadex must be transported and stored in its original packing. Hadex may be used only in accordance with the dosages and applications prescribed. It may not be mixed or used in combination with any other chemical or agent.

While Hadex is a safe product, avoid contact with the eyes or skin. In its undiluted form, Hadex has an irritating effect on the eyes. In the event of such contact, rinse the eyes thoroughly with clean water and seek expert medical advice. The product will cause toxic gases if it comes into contact with acids. Beware of spots upon clothes (only with concentrated product). Hadex is not inflammable or explosive.

Hadex has been in use to good effect since 1979, not only by shipping lines, the offshore industry and shipyards, but also by international aid organizations.

Hadex is suitable for treating drinking water anywhere, on land or at sea. A stock of Hadex ensures immediate action can be taken whenever pollution occurs. A regular dosage in the water supply will prevent any microbiological growth and guarantee a high quality of drinking water.

