

## Metaqua® 8145

### Corrosion and deposits inhibitor for hard and very hard drinking water

#### APPLICATIONS

Metaqua® 8145 is a scale inhibitor that protects from corrosion the drinking water systems with water hardness above 2.5 mol/m<sup>3</sup> (TH > 250 ppm CaCO<sub>3</sub>) and a total alkalinity above 4.3 mol/m<sup>3</sup> (TAC > 215 ppm CaCO<sub>3</sub>).

#### SPECIFICATION

Metaqua® 8145 is a combined liquid product made of special alkaline phosphates and alkaline silicates.

The composition of Metaqua® 8145 and the recommended dosage comply with German standards.

Form:	clear liquid
Density (20°C/68°F):	1,08 ± 0,02 g/cm <sup>3</sup>
pH (1 %):	10,6 ± 0,5
Total quantity of P (based on PO <sub>4</sub> <sup>3-</sup> ):	4,9 ± 0,5% P <sub>2</sub> O <sub>5</sub> = PO <sub>4</sub> <sup>3-</sup> x 0,7473 P = PO <sub>4</sub> <sup>3-</sup> x 0,3261
Total quantity of SiO <sub>2</sub> - (based on SiO <sub>2</sub> ):	1,4 ± 0,3%
Freezing point:	below + 5°C

#### ENVIRONMENTAL IMPACT

Please read the safety data sheet.

#### ACTION PRINCIPLES

Metaqua® 8145 gradually stabilizes the hardness of water and prevents lime scale formation in cold and hot water.

If the temperature exceeds 65°C/150°F, the level of protection against precipitation decreases.

Amorphous sediments appears above the stabilisation limits.

Metaqua® 8145 protects against corrosion, corrosive deposits and "brown water" by covering heavy metal ions such as iron or manganese.

#### DOSAGE

The normal Metaqua® 8145 dose is 100 ml/m<sup>3</sup>.

It is recommended to adjust the dose till the achievement of PO<sub>4</sub><sup>3-</sup> in drinking water in concentration of 5.3 g/m<sup>3</sup>, and SiO<sub>2</sub> - up to 1.5 g/m<sup>3</sup>.

The dose of Metaqua® 8145 in the amount of 100 ml/m<sup>3</sup> is limited by German standards.

#### USAGE

Metaqua® 8145 is used without dilution.

Metaqua® 8145 must be added using an automatic dosing system that is controlled according to the amount of drinking water. All dosing system equipment (containers, pumps, pipes) must be made of alkali-resistant materials.

#### STORAGE

Store at a temperature not higher than 25°C (77°F).

If stored for a longer period of time, slight sediments may occur which do not affect the efficiency of the product.

#### ANALYSIS

To determine the concentration

Metaqua® 8145 uses conventional methods for determining the amount of phosphate (see A7E inorganic phosphate analysis method), taking into account the concentration of PO<sub>4</sub><sup>3-</sup> before treatment.

1 g/m<sup>3</sup> Metaqua® 8145 = 0.05 g/m<sup>3</sup> PO<sub>4</sub><sup>3-</sup>

1 g/m<sup>3</sup> PO<sub>4</sub><sup>3-</sup> = 20.0 g/m<sup>3</sup> Metaqua® 8145

#### SAFEGUARDS

Please read the safety data sheet.

The expiry date of the product is indicated on the label.

#### CERTIFICATES

Our quality management system (ISO 9001:2008) and environmental management system (ISO 14001:2005) are DQS certified.