

## Ferrocid® 5280-S

### Disinfectant for the treatment of drinking water systems

#### APPLICATION

Ferrocid® 5280-S является дезинфицирующим средством, предназначенным для обработки труб систем питьевой воды и дезинфекции емкостей. Ferrocid® 5280-S снижает коррозию меди и стали и уменьшает образование осадков. Ferrocid® 5280-S является жидким продуктом, в составе которого содержится гидрохлорид натрия, щелочные силикаты и фосфаты. Ferrocid® 5280-S соответствует германской директиве питьевой воды (TrinkwV 2001).

#### SPECIFICATION

Form:	clear yellow or light green liquid
pH (concentrated solution)	12,5 ± 0,6
pH (1% solution, 20°C)	11,3 ± 0,6
Density (20°C/68 °F)	1,17 ± 0,03 g/cm <sup>3</sup>
Cl <sub>2</sub>	> 4,0 %
SiO <sub>2</sub>	2,9 ± 0,5 %
g-PO <sub>4</sub> <sup>3-</sup> total phosphate amount (calculated from PO <sub>4</sub> <sup>3-</sup> )	2,0 ± 0,4 %

#### ENVIRONMENTAL IMPACT

Please read the safety data sheet.

#### ACTION

Ferrocid® 5280-S is a wide range of disinfectant that protects against the formation of bacteria, fungi and algae. When disinfecting the system from *Legionella* bacteria, it is recommended to use sodium hydrochloride, the lowest concentration of which is 10 g/l of free chlorine.

#### DOSAGE

##### Continuous dosing

When planning the continuous dosing of the product, local regulations on the

concentration of phosphates, silicates and free chlorine should be taken into account.

##### Inconstant dosing

Ensure that the water supply stops during variable dosing.

1 l/m<sup>3</sup> Ferrocid® 5280-S corresponds to 50-60 mg/l of free chlorine

(recommendation DVGW W 291).

The dosage depends on the degree of contamination of the system. When disinfection is complete, the system should have 10 mg/l of free chlorine (DVGW W551/552).

Based on DVGW recommendation W 291, the Ferrocid® 5280-S solution should be in a fully filled part of the line for 12 hours when using the static method.

#### USAGE

Ferrocid® 5280-S is dosed without dilution.

The product should be served with the appropriate equipment in a quantity proportional to the amount of feed water. All parts of the equipment in contact with the product must be made of alkali-resistant materials.

Ferrocid® 5280-S should be dosed to the most intensively mixed point. In very hard water, calcium carbonate deposits may occur.

#### INCONSTANT DOSING

The pipes must be filled with water treated with Ferrocid® 5280-S.

The supply cannot be stopped until the line is completely filled.

All connection valves must be open until you smell chlorine. Keep the drain open for a few minutes and then close it.

During the disinfection process, the system valves should be opened briefly so that they can also be disinfected. Water should be allowed to leak and then the valves should be closed.

According to DVGW W291, the contact time must be 12 hours.

After disinfection, the system must be rinsed with water. After flushing the system, the free chlorine content should not exceed 0.3 mg/l.

#### WORK SAFETY

Use biocides with caution. Read the label and safety data sheet before use.

#### NOTE

All devices and equipment must also be disinfected.

When discharging waste water into the wastewater system, attention should be paid to the norms and regulations for the composition of waste water. After disinfection, sodium chloride should be neutralized, e.g. by Osmotech 3258, before draining into the wastewater system or surface water.

Micro-organisms (especially organic ones) in contaminated water may not be completely removed. In this case, organic contamination should be eliminated by cleaning the system.

During cleaning, organic particles should be removed using appropriate cleaning and rinsing agents. After that, disinfection should be carried out.

#### ANALITICAL CONTROL

Photometric analysis is recommended to determine the amount of free chlorine. The amount of Ferrocid<sup>®</sup> 5280-S in water can be determined by estimating the concentration of phosphate or silicate, taking into account the concentration before treatment.

$1 \text{ g/m}^3 \text{ Ferrocid}^{\text{®}} 5280\text{-S} = 0,020 \text{ g/m}^3 \text{ PO}_4^{3-}$

$1 \text{ g/m}^3 \text{ PO}_4^{3-} = 50,0 \text{ g/m}^3 \text{ Ferrocid}^{\text{®}} 5280\text{-S}$

$1 \text{ g/m}^3 \text{ Ferrocid}^{\text{®}} 5280\text{-S} = 0,029 \text{ g/m}^3 \text{ SiO}_2$

$1 \text{ g/m}^3 \text{ SiO}_2 = 34,5 \text{ g/m}^3 \text{ Ferrocid}^{\text{®}} 5280\text{-S}$   
PO4<sup>3-</sup> can be determined by analyzing the amount of inorganic A7- phosphates.

For the definition of SiO<sub>2</sub>, the method of photometry can be used to determine the silicates in water A 11-.

#### STORAGE

Store in a cool and dry place in the original container.

#### PRECAUTIONS

Please read the safety data sheet.

The shelf life of the product is indicated on the packaging label.