Chlorine dioxide

Chlorine dioxide is well introduced and permitted for disinfection of drinking water according to Drinking water regulation (TrinkwV 2001) and due to its good disinfection effect, long stability and depot effect is used in pipelines. No disturbing and toxic substances (chloramines, chlorine phenol, halide methane) are formed.

Chlorine dioxide is a well established disinfectant. World-wide more than 2 million kilograms of chlorine dioxide are used per day. Chlorine dioxide is a gas and therefore cannot be dealt with due to transport risks. The applicant does therefore have to prepare a chlorine dioxide solution made out of special starting materials on his own at the spot of application.

According to § 11 of Drinking water regulation TrinkwV 2001 the German Council for Environmental Affairs, has prepared a list of starting materials that are permitted to use when producing chlorine dioxide. The quality of the starting materials and the produced chlorine dioxide solution does have to meet each product standard (European Rules & Regulation).

KyroChem GmbH offers in line with this list, part 1c “starting materials that are allowed to be applied for disinfection”, sets in form of powder or liquid easy to handle for the production of chlorine dioxide solution (please care for section products).

The costs for the starting material necessary to produce chlorine dioxide are normally higher than the costs of chlorine. Nevertheless, chlorine dioxide is a good alternative in those cases when chlorine cannot be used for disinfection. This is always then granted, when the ph value of the water that needs to be disinfected is above 8.

The manual production on the spot of limited chlorine dioxide quantities, offer the best cost effective ratio in terms of disinfection concepts.