

Kemira

Where water
meets chemistry™



KEMIRA INORGANIC COAGULANTS

UNDERSTANDING THE WHOLE WATER TREATMENT PROCESS

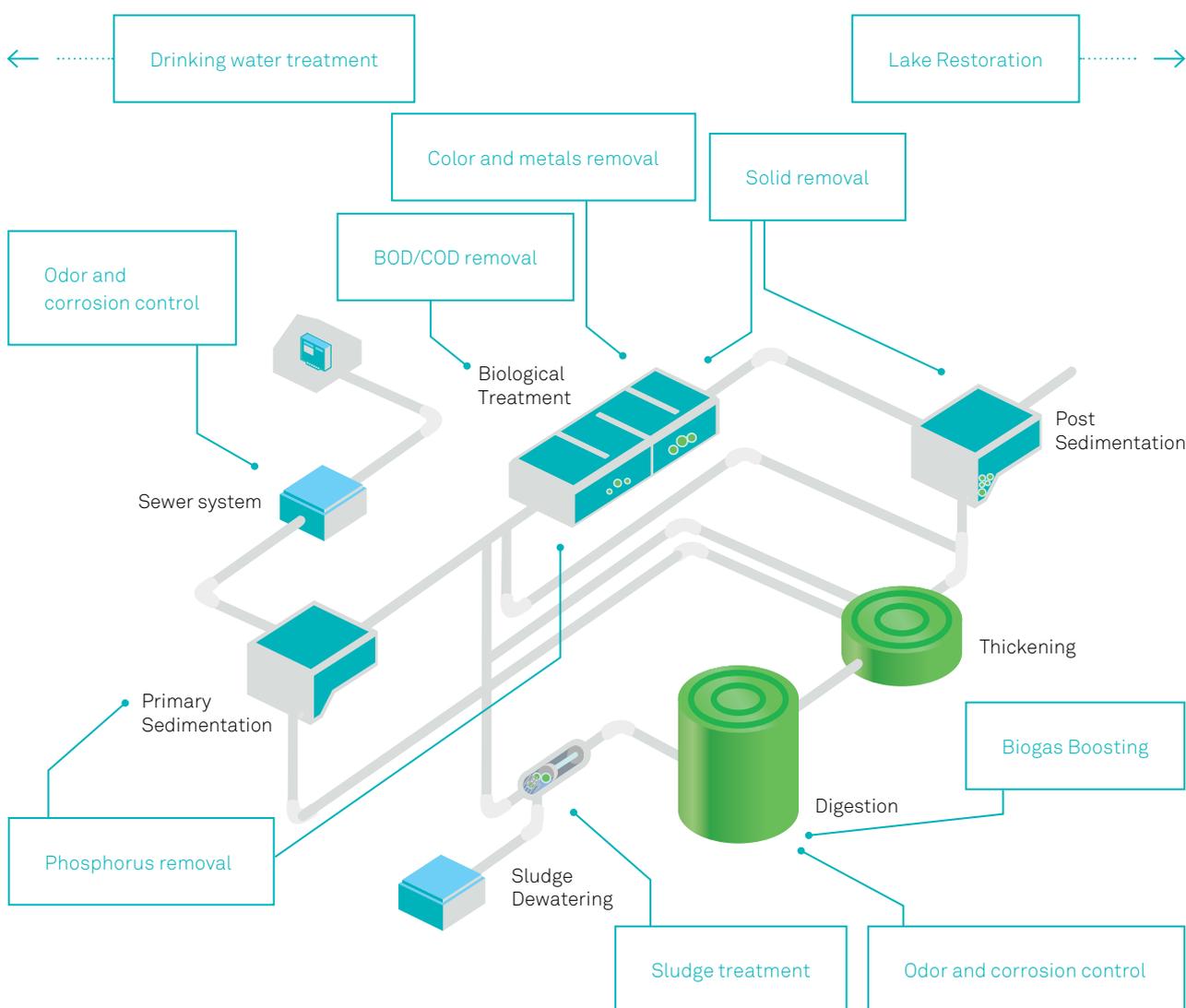
BROAD RANGE OF WATER TREATMENT TO CHOOSE FROM

Water quality is key to a variety of industries and numerous municipal activities. We at Kemira can support water treatment with a broad range of solutions, many of which are customizable. We have understanding and products for the whole process. Our range of inorganic coagulants support the separation of dissolved and particulate impurities from the water.

INORGANIC COAGULANTS FOR WATER TREATMENT

- Our inorganic coagulant portfolio includes a variety of aluminum and iron chemistries developed for optimal performance at a low cost. We manufacture the chemicals at several locations around the world, which ensures fast and secured delivery.

Specialty aluminum based coagulants – Kemira PAX and Kemira ACH – offer a wide range of varying characteristics that make it possible to find products suitable for nearly any water treatment case.



KEY SOLUTIONS FOR WATER TREATMENT

DRINKING WATER

Drinking water treatment requires consistency and reliability. We enable that with our expertise to make water drinkable every moment of every day. All raw water has unique characteristics with varying proportions of organic decomposition products, sand/clay particles, algae, bacteria and viruses. We offer the special grades of inorganic coagulants to deal with all situations.

PHOSPHORUS REMOVAL

At wastewater plants there is a need for removing nutrients. They encourage the growth of organic matter and algae, which cause eutrophication in water bodies. The dominating process for phosphorus removal is chemical precipitation. Typically it is done with aluminum and iron coagulants before the biological treatment, but phosphorus can also be precipitated in the biological treatment, or as the final step of the treatment process. We have developed a broad range of both aluminum and iron coagulants – or even tailor-made blends – with our organic flocculants. That allows us to provide the best product performance over a large range of process conditions.

SOLIDS REMOVAL

Removal of suspended solids is one important issue, when aiming to produce healthy and aesthetic water. Particles in the final water affect other quality parameters such as microbial stability and disinfection by-products. Microorganisms can be shielded by the suspended particles and hence lead to risks of inadequate disinfection efficiency, especially if ultraviolet light (UV) is being used. Tailor-made coagulants and flocculants designed for suspended solids removal can give you exceptionally low residual particle matter.

BOD AND COD REMOVAL

With chemical treatment, removal of oxygen-consuming organic substances, BOD and COD is improved at basically all kinds of wastewater plants.

COLOR REMOVAL

Chemical coagulation helps to deal with color, which is often a sign of organic content and other impurities.

METALS REMOVAL

We support the removal of both particle-bound and dissolved heavy metals.

ODOR AND CORROSION CONTROL

Odor issues and corrosion of concrete pipes are common problems at wastewater treatment plants we can help with.

SLUDGE TREATMENT

The costly treatment and disposal of sludge can be done efficiently with a combination of our polymers and coagulants.

BIOGAS BOOSTING

Biogas production is boosted by creating specific conditions for methane-forming bacteria.

LAKE RESTORATION

We offer various customizable ways to clean lakes depending on its condition, the season, water composition, environmental demands and pH sensitivity.

PRODUCT	PHOSPHORUS REMOVAL		DRINKING WATER TREATMENT	BOD/COD REMOVAL	COLOR REMOVAL	METAL REMOVAL	ODOR & CORROSION	SOLIDS REMOVAL	SLUDGE TREATMENT	BIOGAS BOOSTING	LAKE RESTORATION
	TOT	ORTHO									
ALS, ALG, ALK, AVR	●●●●	●●●●	●●●●	●●●○	●●●○	●●●○	○○○○	●●●○	●●●○	○○○○	●●●●
PAS	●●●●	●●●○	●●●●	●●●○	●●●●	●●●○	○○○○	●●●○	●●●○	○○○○	●●●●
ACL	●●●●	●●●●	●●●●	●●●○	●●●○	●●●○	○○○○	●●●○	●●●○	○○○○	●●●●
PAX – Low basic	●●●●	●●●○	●●●●	●●●○	●●●○	●●●○	○○○○	●●●●	●●●○	○○○○	●●●●
PAX – Med basic	●●●●	●●●○	●●●●	●●●○	●●●○	●●●●	○○○○	●●●●	●●●○	○○○○	●●●●
PAX – High basic	●●●○	●●○○	●●●●	●●●○	●●●○	●●●●	○○○○	●●●●	●●○○	○○○○	●●●●
ACH	●●●○	●●○○	●●●●	●●●○	●●●○	●●●●	○○○○	●●●●	●●○○	○○○○	●●●●
SAX	●●○○	●●●○	○○○○	●●○○	●●○○	●●○○	○○○○	●○○○	●●●○	○○○○	○○○○
PIX (Fe2+)	●●○○	●●●○	○○○○	●○○○	●○○○	●○○○	●●●●	●○○○	●●●●	○○○○	○○○○
PIX (Fe3+)	●●●●	●●●●	●●●●	●●●●	●●●●	●●●○	●●●●	●●●○	●●●●	○○○○	●●●●
BDP	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	○○○○	●●●●	○○○○

○○○○ = None ●○○○ = Poor ●●○○ = Intermediate ●●●○ = Good ●●●● = Very good

TRADE NAME	CHEMISTRY	FORM
Kemira ALS, AVL	Aluminum Sulfate	Liquid
Kemira ALG, AVR, ALK	Aluminum Sulfate	Dry
Kemira PAS	Polyaluminum Sulfate	Liquid
Kemira ACL	Aluminum Chloride	Liquid
Kemira PAX	Polyaluminum Chloride	Dry & Liquid
Kemira PAX, ACH	Aluminum Chlorohydrate	Liquid
Kemira SAX	Sodium Aluminate	Liquid
Kemira PIX	Ferric Chloride	Liquid
	Ferrous Chloride	
	Ferric Sulfate	
	Ferrous Sulfate	
	Ferric Chloro Sulfate	
Kemira Ferix	Ferric Sulfate	Dry
Kemira COP	Ferrous Sulfate	Dry

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