KEMIRA INORGANIC COAGULANTS

UNDERSTANDING THE WHOLE WATER TREATMENT PROCESS
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.

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.

**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.

**BROAD RANGE OF WATER TREATMENT TO CHOOSE FROM**

- Drinking water treatment
- Lake Restoration
- Odor and corrosion control
- Color and metal removal
- Solid removal
- BOD/COD removal
- Sewer system
- Primary sedimentation
- Phosphorus removal
- Digestion
- Thickening
- Sludge dewatering
- Sludge treatment
- Biogas boosting
- Post sedimentation
- Biological treatment
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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.
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<tr>
<th>TRADE NAME</th>
<th>CHEMISTRY</th>
<th>FORM</th>
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<tr>
<td>Kemira ALS, AVL</td>
<td>Aluminum Sulfate</td>
<td>Liquid</td>
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<td>Polyaluminum Sulfate</td>
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<tr>
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