# Plant-based coagulants for wastewater treatment

Hydrex<sup>®</sup> Chemical Solutions

6000 Series I Product Flyer

**WATER TECHNOLOGIES** 



The water treatment requires the use of coagulants for the removal of insoluble contents (suspended solids and soft COD). If metal-based coagulants (PAC Polyaluminum chloride, Ferric chloride or, ferric sulphate solutions) are the substances commonly injected, there are disadvantages associated with their usage, such as ineffectiveness in low-temperature water, Impact on water treated pH and high production of large sludge volumes. Having proven detrimental effects on human health, their use is increasingly restricted by regulations. Specially formulated to counter these drawbacks, the Hydrex plant-based coagulants are the easy, green and cost saving choice for customers willing to replace their inorganic chemicals.

## **FEATURES**

Made from a renewable source (species of tree), The Hydrex 67991 and 6861 ranges are:

- Non toxic
- Biodegradable and more environmentally friendly
- Free from metal salts
- Excellent at removing fat oils and grease due to its emulsion breaker capabilities
- Less impact on pH: no or less caustic soda required for pH correction
- Not corrosive no damage on pumps and other metallic parts of the plant.
- Low molecular weight, cationic charge (coagulant)
- Not approved for drinking water production

### **BENEFITS**

- Lower Chemical dose rates: divided by a factor 3 to 5 compared to inorganics coagulants
- Reduced sludge volume : up to 50% less
- Total Cost of Operation savings
- Safer handling for the operators
- Lower carbon footprint for transportation

# **REFERENCES**

AAK Food, UK, AB World Food UK, Numerous confidential projects, contact us.

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### **APPLICATIONS**

Suitable to any type of industry, particularly the ones generating oily effluent:

- Food & Beverage (ready meals sauce production, cake factories etc)
- Oil & Gas (oil refinery, oil processing ,etc.)
- WWTP with physico-chemical treatment
- WWTP with difficulties to reach discharged standards on chloride
- Industries with acidic effluent (eg.Plastic Recycling)

The Hydrex Chemical Solutions combine the chemicals with expertise of our technical teams, onsite services and a full line of automated systems and Hubgrade digital tools to dose, control and continuously improve performance.

The Hydrex Chemical Solutions are available around the globe and are supported by the local technical personnel of our Veolia entities as well as a team of experts at the headquarter level.