

Table S1. Characteristics of the examined coagulants.

Coagulant	Characteristic	Application	Prize
Cofloc (Atana)	The organic, bio-degradable, sustainable Coagulant come from renewable sources (cactus) It is not toxic, cationic organic polymer with a low molecular weight	<ul style="list-style-type: none"> Cofloc is a coagulant that the separation of floating parts (colloidal matter) advances industrial and domestic wastewater. <ul style="list-style-type: none"> 30 % reduction in sludge compared with metal salt Coagulants This remedy is effective in the treatment of different waste streams, for example in the food industry, and is also effective as an oil- emulsion clinician and demulsifier. Cofloc is manufactured under an ISO 14001 environmental management system and is certified for ISO 9001 quality management system. 	1.68 €/kg
C29510 (Superfloc C-500 series) Kemipol, PL Kemira FI	Liquid polyacrylamide products (emulsions). Cationic polymers of low to high molecular weights	<ul style="list-style-type: none"> They work effectively as primary coagulants and charge neutralization agents. Cationic polyamines often replace or reduce the use of inorganic coagulants for turbidity reduction in process or wastewater streams. They are particularly useful in areas of biological waste processing and fermentation applications 	1.90 €/kg
Sedifloc 575 3F Chimica, It	Cationic polymer of medium molecular weight, fully water-soluble. Polyamines polymer with charge density of 6–7 meq/g It is practically unaffected by the pH.	<ul style="list-style-type: none"> It is suitable for the treatment of primary waters as well as of domestic or industrial wastewaters, where it can either replace completely or partially the inorganic coagulants used traditionally. It can be used in filtration, flotation and sedimentation systems, in the treatment of oily residues from waters containing organic matter, cellulose, bentonites, etc. it can be used also for raw and in-process water color removal and sludge dewatering; as a drainage and retention aid in paper making, for dye retention on cellulosic fibers and dye house effluent decoloration in the textile industry. 	1.40 €/kg
PIX 113 Kemipol, PL Kemira FI	Ferric sulfate, in liquid form based on trivalent iron (Fe ³⁺) Iron (Fe _{tot}) 11,6 ± 0,4 % Sulfate (SO ₄ ²⁻) 30 ± 2 % Chloride (Cl ⁻) <0,1 %	<ul style="list-style-type: none"> for both potable and wastewater treatment, for phosphorus precipitation can be used for color, phosphate and heavy metal removal., for hydrogen sulfide and struvite control and sludge conditioning applications 	0.13 €/kg
Superfloc A110 Kemipol, PL Kemira FI	Anionic polyacrylamide flocculant with high molecular weight.	<p>This product may be beneficial in any liquid-solid separation process. They are especially recommended for:</p> <ul style="list-style-type: none"> Dissolved air flotation Filtration Gravity settling Mechanical dewatering Phosphorus removal , 	2.06 €/kg

Table S2. Effectiveness of pollutant removal from wastewater during a 2-hour sedimentation period with and without dosing coagulants (average \pm SD).

Parametr	Raw wastewater	Wastewater after 2 h sedimentation with addition of			
	after 2 h sedimentation	Atana Cofloc	Kemipol	3F Chimica	PIX113/A110
TSS	46.13 \pm 5.81	50.82 \pm 4.34	76.21 \pm 6.93	81.17 \pm 9.08	72.42 \pm 9.24
TN	7.68 \pm 2.33	3.63 \pm 1.47	9.00 \pm 0.47	14.52 \pm 8.35	18.99 \pm 10.90
TP	12.08 \pm 8.93	20.88 \pm 8.18	24.88 \pm 14.46	29.25 \pm 6.58	35.80 \pm 7.23
PO ₄ -P	4.41 \pm 4.26	18.01 \pm 13.08	22.73 \pm 13.82	20.27 \pm 11.07	81.22 \pm 6.72
NH ₄ -N	4.49 \pm 3.61	3.92 \pm 1.73	4.16 \pm 2.37	5.30 \pm 2.11	2.97 \pm 1.09