

**color
center**

Developing chemistry
for the future



PRODUCTS FOR
WASTEWATER
TREATMENT
RANGE OVERVIEW

The background is a solid light blue color. Overlaid on this are several overlapping, semi-transparent shapes in various shades of blue, ranging from light to dark. These shapes include circles, spheres, and lens-like forms, creating a layered, geometric effect. The shapes are scattered across the upper and middle portions of the page, with some appearing to be in the foreground and others receding into the background.

PRODUCTS FOR
WASTEWATER
TREATMENT
RANGE OVERVIEW



04 _ INTRODUCTION

06 _ FLOCCULANTS
COAGULANTS

08 _ DEFOAMERS

10 _ BIOLOGICAL AND
NUTRIENT SOLUTIONS

11 _ SPECIALTIES

PRODUCTS FOR WASTEWATER TREATMENT RANGE OVERVIEW



Complete solutions
for water treatment.

Wastewater treatment consists of a number of physical, chemical and biological processes that aim to remove existing contaminants in industrial and municipal effluents.

The discharge of untreated wastewater produces negative environmental impacts in receiving watercourses, depending on the concentration of pollutants containing these waters.

It should be noted that when chemicals are dumped into the water below certain limit concentrations, a process of self-purification starts due to a variety of microorganisms (such as bacteria and algae). These microorganisms decompose the waste by metabolizing and transforming them into simple substances such as carbon dioxide, nitrogen, etc. This process applies to organic substances such as detergents and phenols, but also to some inorganic substances, as there are microorganisms capable of absorbing certain metals and incorporating them into their cells. If discharged substances have a high concentration of toxics, microorganisms are destroyed and thus self-purification process stops. Furthermore larger organisms such as fish, crustaceans, and aquatic plants can die poisoned or due to a lack of microorganisms to feed. At the same time, these dead organisms can poison the rest of the wildlife that makes up the food chain, eventually reaching the human being.

The types of treatments that can be applied are classified as:

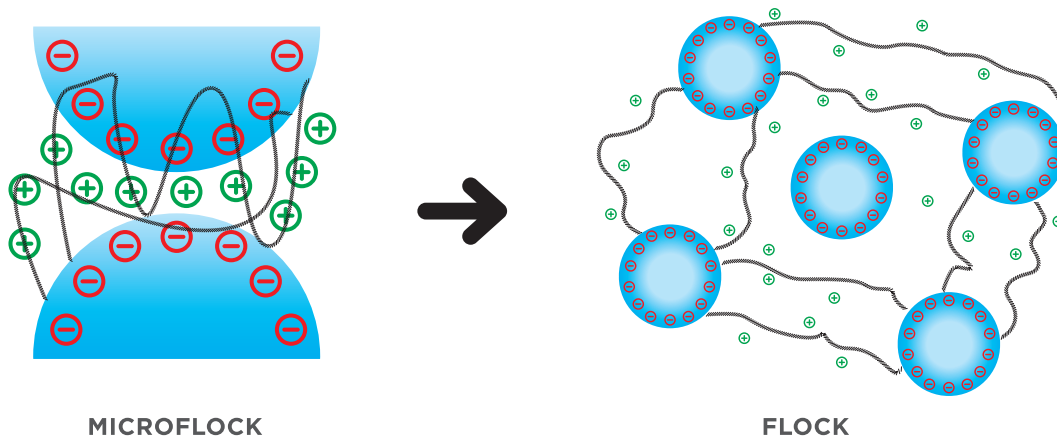
- Physical Treatments
- Chemical Treatments
- Biological Treatments
- Other technologies

COLORCENTER offers a full range of **Chemicals for Water Treatment**, such as coagulants, flocculants (solid and emulsion polyelectrolytes), defoamers, odour suppressants, biological solutions, nutrients, ...

Our extensive experience in the field of wastewater treatment enables us to offer our clients a customized solution from tests to trials in our application lab.

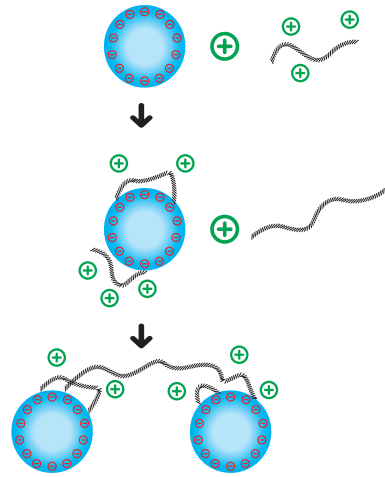
FLOCCULANTS COAGULANTS

Coagulants destabilize a colloidal suspension. They can be defined like products with a high charge density which stick on the surface of the colloidal particles by neutralizing its charge, preventing repulsion between them and therefore, ensuring aggregation. Coagulants are usually metal salts or low molecular weight polymers.



The flocculants are high molecular weight polymers that are capable of trapping various colloidal particles in its polymer chain.

In most cases, the optimal results are obtained when they are applied in water to treat a coagulation step followed by a flocculation stage:



COLORCENTER has available a wide range of coagulants / flocculants / bleaching (cationic and anionic) of different chemical nature and suitable for using both in wastewater and in potable water. Our technical sales department is responsible for advising on the selection of the most adequate coagulant for an optimal technical-economic performance.

CENTERFLOC	Description	Ionic Character	Molecular Weight	Viscosity (25° C. cPs)	Concentration (%)
TA	Decolourizing agent/coagulant	cationic	low	< 1000	50
MGC	Decolourizing agent/coagulant	cationic	low	< 1000	40
PA -30	Polyamine based Coagulant	cationic	high (standar)	< 1000	50
-5010			medium		
-5009			very high		
MAC	Polydadmac based Coagulant	cationic	very high (standar)	8000-12000	40
-5016			medium	500-1000	
-5013			very high	12000-15000	
-5014			ultra high	> 15000	
C granos	Polyacrylamide Flocculant, granulated	anionic	very high	n.a.	90 min.
F-ANG	Reverse emulsion flocculant	cationic	ultra high	500-2000	50

DEFOAMERS

Defoamers are chemical products that minimize or prevent the formation of foam in high turbulence processes. Foams are stable only in systems that contain substances which act as surface active agents, i.e. conventional detergents.

Defoamers contain additives that reduce the surface tension of water. Such additives are rapidly spread on the liquid / gas surface, destabilizing it and promoting the air bubbles to collapse. By this mechanism a fast foam decrease is achieved.

COLORCENTER has a range of defoamers of different chemical nature, with high performance coefficients in antifoaming / defoaming, suitable for application in wastewater treatment and in many industrial sectors.

PRODUCT	Description	Ph	Viscosity (25° C. cPs)	Concentration (%)
COMPLEX EV	Antifoam based on vegetable esters, highly biodegradable	7-9	ca. 1800	24
COMPLEX 1646	Silicone-based defoamer, highly effective	6-8	ca. 1000	16
ANTIESPUMANTE SAE	Mineral oil and organic waxes based defoamer	5-8*	ca. 500	100

(*) 10% in water solution.

Its characteristics differ depending on the application, the field and the equipment where it is dosed. Our technical sales department will advise you on the selection of the optimal antifoam for the best technical-economic balance.

BIOLOGICAL AND NUTRIENT SOLUTIONS

COLORCENTER has a wide range of biological solutions in order to suit your needs, highlighting the reinforcements from biomass, the minimization of generated sludge, the removal of specific compounds, biological odour control aids for optimizing Biological Reactors.

To ensure a correct aerobic treatment, it is sometimes necessary to add nutrients into fresh water. For the growth of biomass, the presence of nitrogen (urea) and phosphorus (phosphoric acid) in the fresh water is required.

PRODUCTO	Description	Ph	Activity
CENTERFOOD XL	Biological Nutrient	7	C.O.D. (mg O ₂ /g) 500-600
CENTER MICRO LF	Lyophilized non-pathogenic bacterial spores	n.a.	n. col./g: 1x10 ⁹

SPECIALTIES

COLORCENTER, also has another range of special products for the care of boilers, osmosis membranes, etc ... as well as for the treatment of sewage odour.

PRODUCTO	Description	Ph
CENTERFLOC F-RUM	Wastewater deodorizing	11-12 ⁽¹⁾
AMPLEX BO-85	Antiscalant and dispersant for boilers	11-12 ⁽²⁾
AMPLEX DEOX	Dissolved oxygen scavenger for boilers	5-6 ⁽³⁾
AMPLEX RO-723	Antifouling for reverse osmosis membranes	2-3 ⁽³⁾

Notes: (1): pH 10%
(2): pH 1%
(3): pH 100%



C/ Xaloc 12-14, Pol. Ind Llevant - 08213 Polinyà (Espanya)

Tel. +34 937 86 11 13

Fax +34 937 86 34 34

info@colorcenter.es

www.colorcenter.es

f @colorcentersa

