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C 202, C-203, C-204 & C-205 COAGULANTS

C-200 Series is a liquid cationic polymer of differing molecular weights which work effectively as primary coagulants and charge neutralization agents in liquid-solid separation processes in a wide variety of industries. The chemistry range available ensures there is a product suitable for each individual application.

Advantages

- Economical to use
 - Unaffected by the pH of the system
 - Moderate to high molecular weights for specific handling equipment.
 - Can replace or reduce inorganic salt use
- Effective at low dosage levels
Resistant to Chlorine
Capable of direct feed – simplifies dilution, feed and applications
Immediately soluble at all concentrations.

Principal Uses

The **C 200 Series** coagulants are highly effective cationic polymers recommended for the following liquid-solid separation processes:

- Water Clarification – improves influent, process and effluent water quality by reducing color, suspended solids and turbidity.
- Dissolved air flotation – result in clearer supernatants, increased float solids, and greater throughput.
- Belt filter, centrifuge, screw press de-watering – for use as the Primary coagulant in dual polymer programs to increase production rates, cake solids and solid capture.
- Filtration – improve filtered water quality and plant throughput

The above are the primary applications for these products. These products may be beneficial in any liquid-solid separation process.

Application

C 200 Series coagulants should be metered to the system by use of a corrosion resistant, positive displacement pump. For maximum effectiveness, add dilution water at a ratio of at least 10:1. Best results are obtained by dispersing feed stream and promoting high turbulence for rapid mixing beyond the application point. Maximum residence time before the separation process yields improved efficiency. Feeding recommendations tailored to your location can be obtained from your Water Specialists representative.

Health and Safety

These products can irritate the eyes and skin. Rubber gloves, goggles and protective clothing are recommended for use while handling. They are not acutely toxic by oral and dermal administration to laboratory animals though eye irritation did result. See the corresponding **Water Specialists** Material Safety Data Sheet for complete safety, health and environmental data.

Handling and Storage

Recommended materials of construction include stainless steel, fiberglass, plastic and glass or epoxy-lined vessels. Do not use iron, copper or aluminum. **Spilled polymer is slippery and should be flushed with water.** The shelf life of these products is 12-24 months when stored at temperatures

between 5-30⁰C. If the material freezes, thaw and mix before use.

Shipping

C 200 Series is available in 55 gallon drums and 275 gallon intermediate bulk containers.

C-200 SERIES COAGULANTS

PRODUCTS*	C 202	C 205	C 204	C 203
Typical Properties				
Appearance	Amber liquid	Amber liquid	Amber liquid	Amber liquid
Charge	cationic	cationic	cationic	cationic
Relative Molecular Weight	Medium	High	Medium	Very High
Specific Granvity	1.01-1.05	1.01-1.05	1.02-1.06	1.06-1.10
Freeze point	-5 ⁰ C	-5 ⁰ C	-5 ⁰ C	-5 ⁰ C
Flash Point, closed cup	>93 ⁰ C	>93 ⁰ C	>93 ⁰ C	>93 ⁰ C
Shelf Life (stored <38 ⁰ C)	2 years	2 years	2 years	2 years
Product Sales Specification				
Total solids, % (method KZ102; CBV 00764)	19.0 Min.	19.0 Min.	39.0 Min.	39.0 Min.
PH (KZ Method 103; CBV 00466)	5.0 – 8.0	5.0 - 8.0	5.0 – 8.0	5.0 – 8.0
Bulk Viscosity @ 25 ⁰ C, cps (Method KZ 101; CBV 00616)	60-300	3,200max.	3,200 max	8,000 – 13,000

Regulatory Approvals (the following designations meet these regularoty requirements)

Chemical inventory Control	See MSDS	See MSDS	See MSDS	See MSDS
NSF International	C 202	C 205	C-204	(none)
Drinking Water Inspectorate (UK)	C 202	(none)	C 204	(none)

Note: These products are available. Ask your **Water Specialists Representative for other products that may not be shown here.*

Government Approval/Regulatory Information

Specific products (see chart) are certified to ANSI/NSF Standard 60 by NSF International and also approved by the U.K. Drinking Water Inspectorate. Several of these products (see chart) can also be used as a decolorizing agent and clarification aid for refining sugar liquors and juices as approved by the FDA (21 CFR 173.5). For chemical inventory regulatory control listing information for the U.S., Canada and European Union, see the MSDS.

IMPORTANT NOTICE

The information and statements herein are believed to be reliable, but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. No warranty of fitness for a particular purpose is made. Nothing herein is to be taken as permission, inducement or recommendation to practice any patented invention without license.