

CATIONIC POLYACRYLAMIDE (CPAM)

Cationic Polyacrylamide (CPAM) is a high-performance, water-soluble polymer characterized by its positive ionic charge. This unique property makes it an essential additive in numerous industrial processes, particularly in wastewater treatment, paper manufacturing, and the oil and gas sector. CPAM is known for its ability to enhance flocculation, coagulation, and water clarification, improving overall operational efficiency.

Chemical Formula

 $[-CH_2-CH(CONH_2)]_m - [-CH_2-CH(CNR_3^+)]_n$

R₃ represents the cationic group responsible for the polymer's positive charge.

Applications

Wastewater Treatment:

- CPAM plays a critical role in the treatment of municipal and industrial wastewater. It binds with negatively charged particles, forming larger flocs that settle quickly, allowing for efficient sludge dewatering and water clarification. Typical applications include:
 - Municipal sewage plants.
 - o Industrial effluents from textile, chemical, and food industries.
 - Sludge treatment in biogas plants.

Paper and Pulp Industry:

• CPAM enhances the performance of paper machines by improving retention, drainage, and paper strength. It helps reduce the loss of fine fibers and fillers, resulting in better-quality paper and increased production efficiency.

Oil and Gas Sector:

- Acts as a stabilizer and viscosifier in enhanced oil recovery (EOR) methods.
- Improves fluid mobility and reduces water-oil separation challenges.

Mining Industry:

CPAM facilitates solid-liquid separation, reducing water consumption and improving tailings management in mineral processing.

Key Properties

- High charge density ensures strong interactions with negatively charged particles.
- High molecular weight for enhanced performance in industrial applications.
- Rapid solubility in water, making it easy to use in large-scale operations.

PACKAGING, STORAGE AND HANDLING

Packaging and Storage

- Packaging: 25 kg kraft paper bags with an inner plastic liner. Custom packaging sizes are available upon request.
- Shelf Life: 2 years under recommended storage conditions.
- Transportation: Classified as non-dangerous goods, ensuring safe and easy handling.

Nonionic Polyacrylamide (NPAM) - Powder

Nonionic Polyacrylamide (NPAM) is a versatile, water-soluble polymer with a neutral charge. It is engineered for applications where low ionic content is necessary, offering excellent stability across a range of environmental conditions. NPAM is particularly effective in improving solid-liquid separation, soil conditioning, and water retention.

Chemical Formula [-CH₂-CH(CONH₂)]_m

Applications

Wastewater Treatment:

- NPAM excels in treating wastewater in systems with neutral to acidic pH conditions. It is particularly effective in industries such as:
 - o Mining wastewater.
 - Food processing effluents.
 - Dye and pigment manufacturing.

Mining Industry:

- Enhances the efficiency of mineral processing by aiding in solid-liquid separation.
- Improves the recovery of valuable minerals while reducing water usage in tailings management.

Agriculture:

- Prevents soil erosion in agricultural fields.
- Increases water retention capacity in soils, promoting better irrigation efficiency and crop growth.

Textile and Dye Industry:

- Assists in dye clarification and wastewater treatment processes.
- Enhances filtration processes by binding with dispersed particles.

Construction Industry:

- Improves the stability and workability of construction materials such as cement and concrete.
- Aids in controlling sediment in construction runoff.

Key Properties

- High molecular weight ensures effective performance in a variety of applications.
- Neutral charge allows compatibility with a range of industrial systems.
- Stable under diverse environmental conditions, including variations in temperature and pH.

Packaging and Storage

- Packaging: 25 kg kraft paper bags with an inner plastic liner. Custom sizes are available to meet specific needs.
- Shelf Life: 2 years when stored in a cool, dry place.
- Transportation: Non-dangerous goods classification ensures hassle-free logistics. By incorporating Cationic and Nonionic Polyacrylamides into your processes, you can achieve higher efficiency, improved product quality, and significant cost savings. These polymers are indispensable tools for modern industrial applications.

ABOUT US

Established in 2017, Chemkraft Chemical Corporation has rapidly emerged as a leading player in the chemicals, petrochemicals, and oil products industry. Strategically headquartered in Germany, with additional offices in Iran, Georgia, and Turkey, we serve as a vital hub for expansive operations across the CIS region, the Middle East, and Europe. Our commitment to excellence, coupled with a robust network, has positioned us as a trusted and reputable entity in the market.

Chemkraft prides itself on delivering high-quality products and exceptional service. Our broad product portfolio includes minerals, industrial chemicals, petrochemicals, and oil products, all sourced from reputable manufacturers to ensure superior quality and reliability. We cater to a diverse range of industries, including manufacturing, pharmaceuticals, agriculture, and more.

Our operations are characterized by extensive expertise in both import and export activities, facilitated by a deep understanding of international trade regulations and logistics. This expertise allows us to provide smooth and efficient transactions, ensuring that our clients receive their products on time and in perfect condition.

Our experienced staff forms the backbone of our operations. Comprised of seasoned professionals with deep industry knowledge, our team is dedicated to providing tailored solutions that meet the specific needs of our clients. This commitment to customer satisfaction ensures that we build long-term relationships based on trust and reliability. Our regional network spans numerous countries in the CIS, the Middle East, and Europe, allowing us to offer localized solutions while maintaining global standards. This extensive reach enables us to respond quickly to market demands and provide our clients with the best possible service.

Chemkraft Chemical Corporation is also deeply committed to quality and sustainability. We adhere to stringent quality control measures at every stage of our operations, ensuring that our products meet international standards and specifications. Additionally, we conduct our business in an environmentally responsible manner, minimizing our environmental impact and promoting sustainable development in the regions we operate.

Our customer-centric approach sets us apart in the industry. We understand that each client has unique requirements, and our team works closely with customers to provide bespoke solutions that address their specific challenges and goals. From inquiry to delivery, our customer support team ensures a seamless experience, prioritizing long-term relationships built on trust and reliability.

Let me know if you'd like any further adjustments.





 For more information about our products and services, please visit our website or contact us directly. We look forward to collaborating with you and contributing to your success.

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