



Since 2005

Paper and Pulp Chemicals Catalogue

All 30 CHEMSUM grades across 5 ranges — sizing, colouring, strength and barrier, wet-end function and water treatment.

CHEMSUM supplies the wet-end and surface chemistry a paper mill runs on - AKD and rosin sizing, basic and direct dyes, dry and wet strength resins, retention and drainage aids, oil-proof barriers and water treatment polymers.

Email

hong@chem-sum.com

Phone / WhatsApp

+86-17627822386

Hours

Monday to Friday, 9:00 - 17:30 (GMT+8)

Address

Unit 2, Unit 7, Building 1, Minghai Center, No. 416, Hulun Buir Road,
Tianjin Free Trade Zone (Dongjiang Comprehensive Bonded Zone),
China

Figures that the company has not published — cumulative export tonnage, number of export countries, satisfaction rate and certificate numbers — are deliberately omitted from this document. Ask the technical desk for current documentation.

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Paper Coloring Agent	Basic Black Dyes, Basic Brown Dyes, Basic Green Dyes, Basic Red Dyes, Basic Violet Dyes, Basic Yellow Dyes, Direct Black Dyes, Direct Brown Dyes, Direct Orange Dyes, Direct Red Dyes, Direct Yellow Dyes
Paper Functional Agent	Fixing Agent, Optical Brightener Agents, Polyamine, Retention and Drainage Aid
Paper Sizing Agent	AKD Curing agent, AKD Emulsifier, AKD Emulsion, Anionic Surface Sizing Agent, Cationic Rosin Sizing Agent, AKD Wax, AKD High Polymer Emulsifier, Liquid AKD
Paper Strength Agent	Dry Strength Agent, Wet Strength Agent, Fluoride-Free Oil Proof Agent, Oil Proof Agent
Water Treatment Chemicals	DADMAC 65%, Defoamer, PolyDADMAC

Paper Coloring Agent

Paper coloring agents provide vivid, uniform, and lasting shades for paper and paperboard. Our range includes basic, direct, and acid dyes for diverse papermaking needs.

The problem. Shade drift between batches is the complaint that reaches the mill's customer, not the mill. Mechanical pulp and chemical pulp take dye differently, and a dye chosen for the wrong furnish bleeds into white water instead of fixing on fibre.

The range. Eleven dyes across two chemistries: cationic basic dyes with strong affinity for lignin-containing mechanical and semi-chemical pulp, and anionic direct dyes matched to cellulose furnish - both compatible with standard retention and fixing systems.

Basic Black Dyes

Basic Black Dyes – Deep, Uniform, and Brilliant Coloration for Paper

Basic Black Dyes are high-strength cationic dyes specially formulated for the coloration of paper and paperboard. With excellent affinity to lignin-containing pulp and mechanical pulp, they provide deep black shade, strong tinting strength, and good color uniformity, making them ideal for producing high-quality black and gray papers.

These dyes are fully soluble in water and offer stable performance under a wide pH range. They exhibit excellent lightfastness, high dyeing intensity, and good compatibility with other cationic dyes and retention systems, ensuring efficient and consistent color development on paper machines.



Key features and advantages

- Brilliant deep black shade with high coloring strength
- Excellent affinity for mechanical and semi-chemical pulp
- Good solubility and easy handling in papermaking systems
- Stable performance with wide pH and temperature tolerance
- Compatible with cationic retention aids and fixing agents

Applications

- Coloring of paper and paperboard
- Production of decorative, packaging, and tissue papers
- Suitable for both batch and continuous dyeing systems

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Basic Brown Dyes

Basic Brown Dyes – Warm, Uniform, and Stable Shade for Paper Coloring

Basic Brown Dyes are cationic dyes specifically formulated for paper coloration, offering rich brown shades with excellent brightness, uniformity, and fastness. They have strong affinity for lignin-containing pulps such as mechanical and semi-chemical pulps, ensuring efficient dye fixation and high color strength during papermaking.

These dyes are fully water-soluble and easy to apply in both batch and continuous systems. With stable performance under neutral and mildly alkaline conditions, Basic Brown Dyes provide reliable coloration results with minimal shade variation and good compatibility with retention and fixing agents.



Key features and advantages

- Deep, warm brown tone with excellent color uniformity
- High affinity and strong dyeing power for mechanical pulp
- Good water solubility and easy application
- Stable shade and strong resistance to fading
- Compatible with cationic auxiliaries and retention systems

Applications

- Coloring of packaging paper, tissue paper, and decorative paper
- Ideal for kraft imitation paper, board, and specialty grades
- Suitable for both continuous dyeing and size press applications

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Basic Green Dyes

Basic Green Dyes – Bright, Stable, and Vivid Coloration for Paper

Basic Green Dyes are high-brightness cationic dyes specially developed for paper and paperboard coloration. They provide brilliant green shades, strong coloring power, and excellent levelness, making them ideal for producing high-quality colored papers with vibrant appearance and consistent tone.

These dyes show excellent affinity to lignin-containing pulps such as mechanical and semi-chemical pulp, ensuring high dye retention and uniform coloration. With good solubility and stability under neutral and mildly alkaline conditions, Basic Green Dyes offer reliable performance across different papermaking systems.



Key features and advantages

- Brilliant and vivid green shade with high color strength
- Excellent affinity and fast dye uptake for mechanical pulp
- Uniform and stable coloration with good levelness
- High solubility and compatibility with cationic retention aids
- Reliable performance under neutral and alkaline papermaking conditions

Applications

- Coloring of printing and decorative papers

- Ideal for tissue, packaging, and specialty papers
- Suitable for both continuous and batch dyeing processes

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Basic Red Dyes

Basic Red Dyes – Brilliant, Uniform, and High-Strength Red Shades for Paper

Basic Red Dyes are high-performance cationic dyes designed for paper coloration under neutral and mildly alkaline papermaking conditions. They produce bright, vivid red shades with excellent color uniformity and strong affinity for mechanical, semi-chemical, and recycled pulps.

With outstanding dyeing strength, solubility, and stability, Basic Red Dyes ensure even color distribution and reliable shade control on high-speed paper machines. They are fully compatible with cationic retention systems, helping papermakers achieve consistent and cost-effective coloration results.



Key features and advantages

- Brilliant and uniform red shade with excellent brightness
- High coloring strength and good lightfastness
- Strong affinity for lignin-containing pulp
- Excellent solubility and process stability
- Compatible with cationic fixatives and retention aids

Applications

- Coloring of decorative, tissue, and packaging paper
- Suitable for printing and writing paper
- Ideal for both batch and continuous dyeing systems

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Basic Violet Dyes

Basic Violet Dyes – Vivid, Uniform, and High-Performance Coloring for Paper

Basic Violet Dyes are cationic dyes specially formulated for paper and paperboard coloration, delivering bright, consistent violet shades with excellent color uniformity and tinting strength. They exhibit strong affinity for lignin-containing pulps such as mechanical and semi-chemical pulps, ensuring efficient dye fixation and even color distribution.

These dyes are fully water-soluble, easy to handle, and stable under neutral and mildly alkaline papermaking conditions. Their reliable performance makes them ideal for producing high-quality colored papers with excellent brightness, fastness, and visual appeal.



Key features and advantages

- Brilliant and uniform violet shade with high tinting strength

- Strong affinity for mechanical and semi-chemical pulp
- Excellent solubility and process stability
- Consistent coloration with minimal shade variation
- Compatible with cationic retention aids and fixing agents

Applications

- Coloring of decorative paper, printing paper, and specialty grades
- Suitable for tissue, packaging, and writing papers
- Effective for both continuous and batch dyeing processes

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Basic Yellow Dyes

Basic Yellow Dyes – Bright, Stable, and High-Tinting Strength for Paper Coloring

Basic Yellow Dyes are high-brightness cationic dyes developed for paper and paperboard coloration. They provide vivid yellow shades with excellent color uniformity, high coloring strength, and strong affinity to mechanical and semi-chemical pulps. These dyes are ideal for achieving brilliant and consistent yellow tones in various paper grades.

With good solubility, stable performance, and strong retention, Basic Yellow Dyes ensure smooth operation on modern paper machines and uniform color distribution throughout the sheet. They are compatible with cationic retention aids and fixatives, making them suitable for continuous papermaking systems.



Key features and advantages

- Bright, pure yellow shade with high coloring intensity
- Excellent affinity for lignin-containing pulp
- Good solubility and stable dyeing performance
- Uniform shade and excellent color fastness
- Compatible with cationic retention and fixing agents

Applications

- Coloring of decorative, packaging, and specialty papers
- Ideal for tissue, kraft imitation, and printing papers
- Suitable for both continuous and batch dyeing processes

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Direct Black Dyes

Direct Black Dyes – Deep, Uniform, and Cost-Effective Coloring for Paper

Direct Black Dyes are high-performance anionic dyes widely used in paper coloration, offering deep black shades, excellent penetration, and uniform coloring. They are especially suitable for cellulose fiber-based pulps, providing strong affinity and easy application in both continuous and batch dyeing systems.

With good solubility, stable shade, and high color yield, Direct Black Dyes deliver consistent results under neutral and slightly alkaline papermaking conditions. They are also compatible with retention aids and fixing agents, ensuring efficient dye retention and reduced color loss in white water systems.



Key features and advantages

- Deep and uniform black shade with strong tinting strength
- Excellent solubility and easy to use in papermaking systems
- Stable color performance under various pH conditions
- Cost-effective solution with good retention efficiency
- Compatible with anionic and cationic papermaking additives

Applications

- Coloring of packaging paper, kraft paper, and decorative paper
- Suitable for tissue and printing papers requiring deep shades
- Applicable in both batch and continuous dyeing operations

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Direct Brown Dyes

Direct Brown Dyes – Warm, Uniform, and Cost-Effective Brown Shades for Paper

Direct Brown Dyes are high-quality anionic dyes specifically designed for paper coloration. They produce rich brown shades with excellent color uniformity, good solubility, and strong fiber affinity, making them ideal for various paper grades such as packaging, kraft, and decorative papers.

These dyes exhibit stable shade, high dyeing strength, and reliable performance under neutral and slightly alkaline papermaking conditions. With excellent compatibility with retention and fixing systems, Direct Brown Dyes ensure consistent color tone, good lightfastness, and minimal bleeding.



Key features and advantages

- Warm and uniform brown shade with strong coloring power
- Excellent solubility and easy operation in paper machines
- Stable performance under neutral and alkaline conditions
- High affinity for cellulose fiber and good retention efficiency
- Cost-effective solution with consistent color results

Applications

- Coloring of packaging, kraft, and decorative papers

- Suitable for cultural and tissue papers requiring brown tones
- Applicable in both batch and continuous dyeing systems

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Direct Orange Dyes

Direct Orange Dyes – Bright, Uniform, and Reliable Coloring for Paper

Direct Orange Dyes are water-soluble anionic dyes formulated for paper coloration, offering bright orange shades with excellent uniformity, good solubility, and high color yield. They show strong affinity for cellulose fibers, ensuring stable and consistent dyeing performance in both continuous and batch papermaking systems.

With excellent shade stability, good levelness, and strong retention, Direct Orange Dyes help papermakers achieve vivid color effects while maintaining production efficiency. They perform reliably under neutral and slightly alkaline conditions and are compatible with commonly used retention and fixing agents.



Key features and advantages

- Bright and vivid orange shade with high coloring strength
- Excellent solubility and even color distribution
- Stable performance under neutral and alkaline papermaking conditions
- Strong affinity for cellulose fiber with high retention rate
- Cost-effective and easy to handle in paper systems

Applications

- Coloring of decorative, packaging, and cultural papers
- Suitable for kraft, printing, and specialty papers
- Applicable in both batch and continuous dyeing processes

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Direct Red Dyes

Direct Red Dyes – Vivid Red Shades for High-Quality Paper Coloring

Direct Red Dyes are high-performance, water-soluble anionic dyes designed for the coloration of paper and paperboard. They provide brilliant red shades with excellent brightness, uniformity, and fiber affinity, making them ideal for achieving strong and consistent color effects across various paper grades.

These dyes dissolve easily in water and deliver stable shade and high color yield under neutral or slightly alkaline conditions. Their good retention on cellulose fibers ensures efficient use of dye and reduces waste, making them both cost-effective and environmentally friendly.



Key features and advantages

- Bright, vivid red tone with superior color strength

- Excellent solubility and even color distribution
- Stable shade and good fastness under normal papermaking conditions
- High affinity and retention on cellulose fiber
- Compatible with common retention and fixing systems

Applications

- Ideal for coloring writing, printing, and decorative papers
- Suitable for packaging paper, kraft paper, and tissue paper
- Works effectively in both continuous and batch dyeing processes

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Direct Yellow Dyes

Direct Yellow Dyes – Bright Yellow Shades for High-Performance Paper Coloring

Direct Yellow Dyes are water-soluble anionic dyes specially formulated for paper and paperboard coloration. They deliver bright, clean yellow shades with excellent color uniformity, high strength, and superior fiber affinity, making them ideal for a wide range of papermaking applications.

These dyes exhibit excellent solubility and stability in neutral and slightly alkaline conditions, ensuring consistent shade and smooth dyeing performance. With good retention on cellulose fibers, they offer both high coloring efficiency and cost savings, while maintaining environmental friendliness in the production process.



Key features and advantages

- Brilliant yellow tone with excellent brightness and clarity
- High solubility and stable performance in papermaking systems
- Good fastness and color consistency
- Strong fiber affinity ensures efficient dye utilization
- Compatible with various retention and fixing agents

Applications

- Widely used in the production of writing and printing paper
- Suitable for packaging, tissue, and decorative papers
- Works effectively in both continuous and batch paper coloring systems

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Paper Functional Agent

Paper Functional Agents are essential chemical additives designed to improve the overall performance, appearance, and processing efficiency of paper and paperboard products.

The problem. Fines, fillers and dye that leave with the white water are money going down the drain, and they take sheet uniformity and drainage rate with them.

The range. Retention and drainage aids, cationic fixing agents, polyamine and optical brighteners - the wet-end additives that keep expensive inputs in the sheet and the machine running at speed.

Fixing Agent

Fixing Agent – Enhance Pigment and Additive Retention in Papermaking

Fixing Agents are specialized papermaking chemicals designed to improve the retention of pigments, dyes, and other additives during paper production. By promoting stronger binding between fibers and additives, fixing agents help reduce chemical loss, improve paper uniformity, and enhance the overall quality of the final product.

Our fixing agents are cationic polymers with high affinity for anionic dyes, pigments, and fillers. They provide excellent stability, high efficiency, and compatibility with various pulp types and papermaking systems. These agents are easy to handle, water-soluble, and effective even at low dosages.



Key features and advantages

- Improves retention of pigments, dyes, and fillers
- Enhances paper uniformity and surface quality
- High efficiency with low dosage requirements
- Compatible with a wide range of papermaking additives
- Reduces chemical waste and optimizes production cost

Applications

- Retention of dyes and pigments in colored papers
- Enhancing filler retention in printing and packaging papers
- Improves performance of coated and specialty papers
- Suitable for both neutral and alkaline papermaking systems

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Optical Brightener Agents

Optical Brightener Agents – Enhance Paper Brightness and Visual Appeal

Optical Brightener Agents (OBAs) are specialized chemicals used to improve the brightness and whiteness of paper by absorbing ultraviolet light and re-emitting it as visible blue light. They help paper achieve a crisp, clean, and visually appealing appearance without affecting the strength or printability.

Our optical brighteners are formulated for high stability, excellent compatibility, and efficient dispersion, ensuring consistent brightness and performance across different pulp types and papermaking systems. They are effective in both coated and uncoated papers and can be used in neutral and alkaline processes.



Key features and advantages

- Significantly enhances paper brightness and whiteness
- Improves visual appeal without compromising strength
- High stability and easy dispersion in papermaking systems
- Compatible with various pulps, fillers, and papermaking chemicals
- Suitable for both coated and uncoated paper grades

Applications

- Printing and writing papers
- Packaging and decorative papers
- Tissue and specialty papers
- Board papers requiring enhanced whiteness and brightness

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Polyamine

Polyamine – Efficient Retention, Drainage, and Wet-Strength Aid for Papermaking

Polyamine is a highly cationic polymer used in papermaking to enhance retention, drainage, and wet-strength performance. It effectively binds anionic fines, fillers, and dyes to fibers, improving paper uniformity, reducing chemical loss, and enhancing overall production efficiency.

Our polyamine products offer high cationic charge density, excellent solubility, and stable performance under a wide range of pH and temperature conditions. They are compatible with various pulps, wet-end additives, and other retention or fixing agents, providing reliable and consistent results for modern paper machines.



Key features and advantages

- Improves retention of fines, fillers, dyes, and pigments
- Enhances drainage and reduces water usage
- Boosts wet-strength and paper durability
- High solubility, stable performance, and easy handling
- Compatible with multiple papermaking systems and chemicals

Applications

- Retention and drainage aids in printing, writing, and packaging papers
- Enhancing wet-strength in tissue, towel, and specialty papers
- Used in combination with other cationic polymers for improved performance
- Suitable for both continuous and batch papermaking systems

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Retention and Drainage Aid

Retention and Drainage Aid – Improve Paper Formation and Production Efficiency

Retention and Drainage Aids are essential papermaking chemicals designed to enhance the retention of fines, fillers, and chemicals while improving water removal efficiency during sheet formation. By optimizing fiber bonding and drainage, they help produce more uniform paper with higher strength and better runnability on the paper machine.

Our retention and drainage aids are formulated from high-efficiency cationic or anionic polymers, ensuring superior performance under a wide range of papermaking conditions. They are compatible with various pulp types and wet-end additives, delivering stable results and reduced chemical consumption.



Key features and advantages

- Improves retention of fines, fillers, and pigments
- Enhances drainage rate and paper machine productivity
- Promotes uniform fiber distribution and better sheet formation
- Compatible with multiple papermaking systems and additives
- Reduces chemical loss and production cost

Applications

- Printing and writing paper
- Packaging paper and board
- Tissue and specialty papers
- Suitable for high-speed paper machines and closed water systems

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Paper Sizing Agent

Enhance paper performance with our high-quality paper sizing agents, including AKD, ASA, and surface sizing chemicals—improving water resistance and printability.

The problem. Sizing decides whether a sheet repels water or drinks it. Get the AKD emulsion, its emulsifier and its curing conditions wrong and you pay for it twice - once in Cobb values that miss spec, once in reel edges that size unevenly.

The range. CHEMSUM supplies the whole AKD chain rather than one link of it: wax, high polymer emulsifier, ready-to-use liquid emulsion, curing agent, plus cationic rosin size for acidic and weakly neutral systems and an anionic surface size for the size press.

AKD Curing agent

AKD Curing agent - Papermaking Additive

Our AKD Curing Agent is a specialized additive designed to accelerate the curing (esterification) reaction of alkyl ketene dimer throughout the drying and pressing stages. By promoting faster and more complete bonding of AKD to cellulose fibers, it ensures superior water resistance, roll stability, and long-term durability.



Key features and advantages

- Enhanced Curing Efficiency — speeds up the esterification between AKD molecules and fiber hydroxyl groups, especially under moderate drying conditions
- Improved Barrier Performance — helps form a denser and more uniform hydrophobic layer, boosting water repellency and reducing Cobb values
- Better Roll and Slitting Stability — ensures uniform sizing towards roll edges and reduces “slug” or leveling issues
- Reduced AKD Dosage — by improving reaction efficiency, lower AKD additions can achieve equivalent performance, offering cost savings
- Compatibility — works well with common AKD emulsions, internal sizing systems, and other wet-end additives
- Optimized for Alkaline Papermaking — stable under neutral to slightly alkaline pH, suitable for modern base paper systems

Applications

- Neutral to slightly alkaline base paper systems
- AKD internal sizing lines running under moderate drying conditions
- Mills reducing AKD dosage at constant sizing performance

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AKD Emulsifier

AKD Emulsifier – Stable Emulsion for Efficient Internal Sizing

AKD Emulsifier is a key auxiliary agent specially designed for the preparation of Alkyl Ketene Dimer (AKD) emulsions used in neutral and alkaline papermaking. It ensures fine particle dispersion, excellent storage stability, and uniform distribution of AKD on fibers, greatly enhancing paper sizing efficiency.

With strong emulsification and stabilization performance, this product helps form a stable and smooth emulsion with consistent particle size, preventing coagulation or separation during storage. It enables higher AKD utilization, improved hydrophobicity, and better paper surface strength.



Key features and advantages

- Excellent emulsification and dispersion properties
- Produces fine, stable AKD emulsions with long shelf life
- Enhances sizing efficiency and hydrophobic performance
- Suitable for various AKD waxes and papermaking conditions
- Easy to use and compatible with continuous emulsification systems

Applications

- Widely used in the production of AKD sizing emulsions for printing paper, writing paper, packaging board, and specialty papers.

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

AKD Emulsion

AKD Emulsion – Effective Internal Sizing for High-Quality Paper

AKD Emulsion (Alkyl Ketene Dimer Emulsion) is a highly efficient internal sizing agent widely used in neutral and alkaline papermaking. It forms a hydrophobic layer on the fiber surface, effectively improving paper's water resistance, surface strength, and printability. Compared with traditional acid sizing agents, AKD offers better durability, environmental friendliness, and process stability.

Our AKD Emulsion is prepared using advanced emulsification technology and high-quality emulsifiers to ensure fine particle size, excellent storage stability, and high sizing efficiency. It provides consistent performance across various grades of paper, from writing and printing paper to packaging board and specialty paper.



Key features and advantages

- Excellent sizing efficiency and water repellency
- Fine and stable emulsion with uniform particle size
- Enhances paper surface strength and print quality
- Compatible with a wide pH range (neutral to alkaline)
- Environmentally friendly, free from rosin and aluminum sulfate
- Reduces sizing reversion and improves long-term stability

Applications

- Printing and writing paper

- Packaging board and carton paper
- Coated and specialty papers
- Food-grade and liquid packaging paper

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Anionic Surface Sizing Agent

Anionic Surface Sizing Agent – Improve Paper Strength and Surface Performance

Anionic Surface Sizing Agent is a water-based polymer emulsion specially designed for surface sizing applications in papermaking. It forms a uniform and dense film on the paper surface, significantly enhancing surface strength, water resistance, printability, and coating holdout. With excellent compatibility and easy application, it is ideal for improving the performance of various paper grades.

This product features strong film-forming ability and stable anionic dispersion, providing superior runnability and smoothness on the paper machine. It can be used alone or combined with starch, AKD, or ASA to further improve sizing and surface quality.



Key features and advantages

- Enhances surface strength, water resistance, and printability
- Excellent compatibility with starch and other surface agents
- Improves coating holdout and reduces linting and dusting
- Provides stable operation and uniform film formation
- Suitable for both neutral and alkaline papermaking systems

Applications

- Surface sizing for writing and printing paper
- Coated and base paper for packaging board
- High-grade cultural paper and specialty paper

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Cationic Rosin Sizing Agent

Cationic Rosin Sizing Agent – Reliable Internal Sizing for Acidic and Neutral Papermaking

Cationic Rosin Sizing Agent is a modified rosin-based internal sizing chemical designed for acidic to neutral papermaking systems. It provides excellent hydrophobicity and improves paper water resistance, surface strength, and printability by forming a stable rosin–alum complex within the fiber network.

Compared with traditional anionic rosin sizes, this product features a cationic modification that enhances retention on fibers and improves sizing efficiency, even under conditions with lower aluminum sulfate dosage. It ensures uniform distribution, stable performance, and reduced sizing reversion during storage or high-speed paper production.



Key features and advantages

- Excellent internal sizing performance and water resistance
- Strong fiber affinity and high retention efficiency
- Effective under acidic and weakly neutral conditions
- Improved sizing stability and reduced dosage of alum
- Compatible with various pulps and papermaking additives

Applications

- Printing and writing paper
- Cultural and offset paper
- Packaging board and specialty grades
- Suitable for high-speed paper machines

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

AKD Wax

AKD Wax – High-Performance Internal Sizing for Paper

AKD Wax (Alkyl Ketene Dimer Wax) is a key internal sizing agent widely used in neutral and alkaline papermaking. It reacts with cellulose fibers to form a hydrophobic layer, providing excellent water resistance, surface strength, and dimensional stability to paper and paperboard.

Our AKD Wax is produced with high purity and consistent particle size, ensuring stable emulsification, efficient retention, and reliable performance across various pulp types. It is suitable for both batch and continuous emulsification systems, enabling high-quality sizing and improved paper properties.



Key features and advantages

- Excellent internal sizing performance for water-resistant paper
- High purity and uniform particle size for consistent results
- Enhances paper surface strength, printability, and dimensional stability
- Compatible with neutral and alkaline papermaking systems
- Easy emulsification and stable storage

Applications

- Printing and writing papers
- Packaging paper and paperboard
- Specialty papers requiring enhanced water resistance
- Food contact papers and liquid packaging boards

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

AKD High Polymer Emulsifier

AKD High Polymer Emulsifier – Efficient Emulsification for Superior Paper Sizing

AKD High Polymer Emulsifier is a specially designed emulsifier for Alkyl Ketene Dimer (AKD) wax, enabling the production of stable, high-performance AKD emulsions for internal sizing in neutral and alkaline papermaking. It ensures uniform dispersion, fine particle size, and excellent retention, enhancing the water resistance, surface strength, and printability of paper.

Our AKD High Polymer Emulsifier offers high stability, low foaming, and compatibility with various pulp types and papermaking additives. Its advanced formulation allows for efficient emulsification even under high-speed production conditions, providing reliable and cost-effective sizing performance.



Key features and advantages

- Produces stable, fine AKD emulsions with high retention
- Enhances paper water resistance, surface strength, and print quality
- Excellent compatibility with pulps and other papermaking chemicals
- Low foaming, easy to handle, and highly stable
- Suitable for both batch and continuous emulsification systems

Applications

- Internal sizing of printing, writing, and packaging papers
- Production of high-quality food contact and liquid packaging paper
- Specialty papers requiring enhanced water resistance and surface strength

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Liquid AKD

Liquid AKD – Ready-to-Use Internal Sizing for Paper

Liquid AKD (Alkyl Ketene Dimer) is a high-efficiency internal sizing agent designed for neutral and alkaline papermaking. Supplied as a ready-to-use emulsion, it provides excellent water resistance, improved surface strength, and enhanced printability by forming a hydrophobic layer on cellulose fibers.

Our Liquid AKD features stable emulsification, fine particle size, and high retention, ensuring uniform distribution and consistent performance across a variety of pulp types. Its easy-to-use formulation simplifies dosing, reduces preparation time, and maintains high efficiency even in high-speed paper production systems.



Key features and advantages

- Ready-to-use emulsion for quick and efficient application
- Improves paper water resistance, surface strength, and print quality
- Stable emulsion with fine, uniform particle size
- High compatibility with neutral and alkaline papermaking systems
- Easy handling and consistent sizing performance

Applications

- Internal sizing of printing and writing paper
- Packaging paper and paperboard
- Food contact and liquid packaging papers
- Specialty papers requiring high water resistance and dimensional stability

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Paper Strength Agent

Enhance paper strength and durability with our paper strength agents—improving fiber bonding, dry and wet strength for high-quality, sustainable paper.

The problem. A sheet that passes its dry tensile test can still fall apart the moment it meets moisture, and a food wrapper that fails on grease is scrap regardless of how strong it is dry.

The range. Dry strength agents for fibre-to-fibre bonding, PAE-based wet strength resins for tissue, towel and liquid packaging, and two oil proof agents - including a fluorine-free grade for food contact work.

Dry Strength Agent

Dry Strength Agent – Enhance Fiber Bonding and Paper Durability

Dry Strength Agents are key papermaking additives designed to improve the dry strength and mechanical properties of paper and paperboard. By enhancing fiber-to-fiber bonding, they increase sheet strength, reduce fiber loss, and improve overall paper quality without affecting other papermaking processes.

Our dry strength agents include cationic starches and synthetic polymers, providing excellent retention, uniform distribution, and compatibility with a wide range of pulp types and papermaking systems. They are easy to handle, soluble in water, and effective even at low dosage.



Key features and advantages

- Significantly improves dry strength and tensile properties
- Enhances fiber bonding and sheet formation
- High compatibility with various pulps and papermaking additives
- Efficient at low dosage, cost-effective, and environmentally friendly
- Maintains paper smoothness and printability

Applications

- Printing and writing paper
- Packaging board and carton paper
- Tissue and specialty papers

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Wet Strength Agent

Wet Strength Agent – Improve Paper Durability Under Moist Conditions

Wet Strength Agents are specialized papermaking chemicals designed to enhance the strength and integrity of paper and paperboard when wet. They form durable chemical bonds within the fiber network, providing excellent resistance to water, moisture, and high-humidity environments.

Our wet strength agents include polyamide-epichlorohydrin (PAE) resins, urea-formaldehyde resins, and other cationic polymers, offering high efficiency, good retention, and compatibility with various pulps and papermaking systems. They help manufacturers produce high-performance paper with stable wet strength without compromising printability or sheet formation.



Key features and advantages

- Significantly improves wet strength and resistance to water damage
- Enhances fiber bonding and maintains sheet integrity when wet
- High retention and compatibility with different pulps
- Easy to apply and cost-effective
- Maintains smoothness and printability of paper

Applications

- Tissue and towel papers
- Packaging paper for liquids or high-moisture products
- Specialty papers requiring durable wet strength
- Food packaging and filter papers

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Fluoride-Free Oil Proof Agent

Fluoride-Free Oil Proof Agent – Safe and Effective Oil Resistance for Paper

Fluoride-Free Oil Proof Agents are environmentally friendly additives designed to provide excellent oil and grease resistance for paper and paperboard without the use of fluorochemicals. They form a protective barrier on the fiber surface, preventing oil penetration while maintaining paper strength and printability.

Our fluoride-free oil proof agents are based on bio-based waxes, silicone, and polymer emulsions, offering stable performance, easy application, and compatibility with various papermaking processes. They provide a sustainable solution for food packaging and other applications requiring oil-proof yet safe materials.



Key features and advantages

- Provides reliable oil and grease resistance without fluorochemicals
- Environmentally friendly and food-safe
- Maintains paper strength, smoothness, and printability
- Compatible with different pulps and papermaking systems
- Easy to apply via surface sizing or coating

Applications

- Food packaging paper (fast food wrappers, takeaway boxes, bakery paper)
- Coated and uncoated packaging board
- Specialty papers requiring safe and sustainable oil resistance
- Paper used in disposable food service products

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Oil Proof Agent

Oil Proof Agent – Reliable Oil and Grease Resistance for Paper

Oil Proof Agents are specialized chemicals designed to provide excellent oil and grease resistance for paper and paperboard, enhancing their suitability for packaging applications. They create a protective barrier on the paper surface or within the fiber network, preventing oil penetration while maintaining paper strength and printability.

Our oil proof agents are available in fluorine-free, silicone-based, wax-based, and polymer-based formulations, offering stable performance, easy application, and compatibility with various papermaking processes. They are environmentally friendly, efficient, and help manufacturers produce high-quality, functional paper products.



Key features and advantages

- Provides reliable oil and grease resistance
- Maintains paper strength, smoothness, and printability
- Compatible with different pulps and papermaking systems
- Stable performance under various process conditions
- Environmentally friendly and suitable for food contact applications

Applications

- Food packaging paper (fast food wrappers, takeaway boxes, bakery paper)
- Coated and uncoated packaging boards
- Specialty papers requiring oil-proof properties
- Disposable paper products in food service and catering

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Water Treatment Chemicals

High-performance water treatment chemicals for purification, coagulation, and scale control—ensuring clean, efficient, and sustainable water systems.

The problem. Closed water loops concentrate whatever you do not remove. Colour, suspended solids and anionic trash build up until they show in the sheet.

The range. PolyDADMAC and polyamine coagulants for suspended solids and colour removal, DADMAC 65% monomer for mills and formulators who polymerise in-house, and defoamers for white water and coating systems.

DADMAC 65%

DADMAC 65% – High-Purity Cationic Monomer for Paper Chemical Synthesis

DADMAC (Diallyldimethylammonium Chloride) 65% is a high-purity, quaternary ammonium salt monomer widely used in the production of cationic polymers for the papermaking industry. It serves as a key raw material for synthesizing PolyDADMAC, cationic coagulants, and retention aids, offering strong cationic charge density and excellent reactivity.

With stable concentration, low impurity content, and superior polymerization activity, DADMAC 65% ensures consistent product performance and high efficiency in downstream polymer production. It also provides good water solubility and chemical stability, making it suitable for continuous and batch polymerization systems.



Key features and advantages

- High purity and stable 65% concentration
- Strong cationic charge density for effective polymerization
- Low residual impurity and excellent storage stability
- Excellent water solubility and easy handling
- Ensures consistent polymer quality and performance

Applications

- Raw material for PolyDADMAC and other cationic polymers
- Used in retention aids, coagulants, and fixatives for papermaking
- Suitable for water treatment chemicals, textile auxiliaries, and oilfield polymers

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

Defoamer

Defoamer – Efficient Foam Control for Stable and Clean Papermaking

Defoamer is a specially formulated chemical designed to eliminate and prevent foam in various stages of the papermaking process. Excess foam can cause sheet defects, reduce drainage efficiency, and affect paper quality. Our defoamers provide rapid foam suppression, long-lasting performance, and excellent system compatibility, ensuring smooth operation and stable paper formation.

Formulated with advanced surfactants and dispersing agents, the product is available in silicone-based, polyether-based, and fatty alcohol-based types, suitable for different pulp systems and process conditions. It performs effectively under both high temperature and high shear environments.



Key features and advantages

- Fast and long-lasting foam control
- Excellent dispersibility and system compatibility
- Reduces surface defects and improves drainage efficiency
- Stable performance under high temperature and pH conditions
- Suitable for use in stock preparation, white water, and coating systems

Applications

- Pulping and stock preparation
- Paper machine wet end and white water circulation
- Coating color and wastewater treatment systems

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.

PolyDADMAC

PolyDADMAC – High-Performance Cationic Polymer for Papermaking

PolyDADMAC is a highly cationic polymer widely used in the papermaking industry to improve retention, drainage, and water treatment efficiency. It effectively binds anionic fines, fillers, and dyes to fibers, enhancing paper uniformity, strength, and overall machine performance.

Our PolyDADMAC offers high charge density, excellent solubility, and stable performance across a range of papermaking systems. It is compatible with various pulps and wet-end additives, providing reliable results in high-speed paper production and wastewater treatment applications.



Key features and advantages

- Enhances retention of fines, fillers, and pigments
- Improves drainage and sheet formation
- Boosts wet-strength and paper uniformity
- High solubility and stable performance under different conditions
- Compatible with multiple papermaking systems and chemical additives

Applications

- Retention and drainage aids in printing, writing, and packaging papers

- Wet-end additive for improved paper formation and strength
- Wastewater treatment to remove suspended solids and color
- Suitable for continuous and batch papermaking processes

Packing. Liquid grades ship in IBC totes carrying net weight, gross weight, lot number, production date and expiry date on the label. Exact pack sizes and drum options are confirmed on quotation.