



Since 2005

Paper Strength Agent Data Sheets

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

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.

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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.

Paper Strength Agent

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

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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

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.

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.