CP88-LH5EX

High Performance Glue Additive for Waterproofing

Improved **water resistance** and reliable **corrugated-board performance**

WATER RESISTANCE

EASY INTEGRATION INTO PRODUCTION

SUSTAINABLE & ENVIRONMENTALLY FRIENDLY

DOR GROUP

Helping manufacturers achieve **stronger products** and more **sustainable** operations.

CP88-LH5EX

Water Resistance to Starch Glue

Water-resistant corrugated board is required across industries exposed to **wet or humid environments** — from plant to consumer.

WATER RESISTANT PACKAGING

APPLICATION AREAS

- Foods and Beverages
- Frozen foods
- Tobacco
- High humidity areas
- Fruits and vegetables
- Flower packaging
- Hi-Tech consumer products
- Outdoor storage

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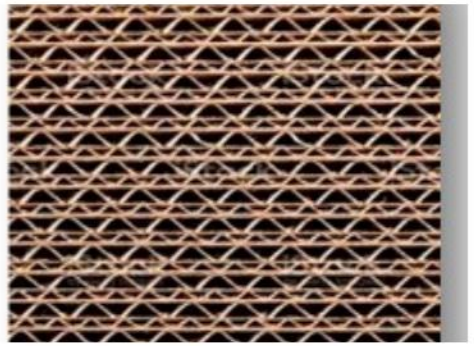
Water Resistance Mechanism in Starch Glue

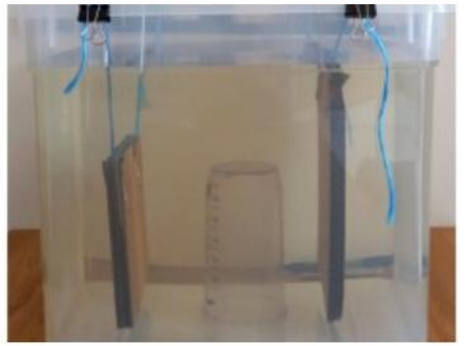
CP88-LH5EX helps starch adhesive resist water by forming a **crosslinked polymer network** during heat curing.

KEY TAKEAWAYS

- Humidity weakens starch glue and can lead to board separation.
- Ketone-aldehyde thermosetting resin crosslinks with starch under heat.
- Curing creates an infusible, insoluble 3D polymer network.
- Optimum water resistance after a 4–24 hr stocking period.



CORRUGATED BOARD STRUCTURE



WATER RESISTANCE TEST

HEAT CURING + CROSSLINKING

Humidity
weakens glue

CP88 + heat
crosslinks starch

Water-resistant
board performance

Crosslinking converts starch adhesive + resin into a **3D insoluble network** that supports water resistance.

CP88-LH5EX

FDA Compliance & Normal Usage

Conforms to FDA

CP-88/LH5EX is fully acceptable for FDA applications (per Regulation 21 CFR 175.105) as an additive to corrugating adhesive.

Normal Usage

- Add to ready-for-use, caustic-catalyzed starch-based adhesives.
- Recommended dosage: 1.1–1.5% of the total liquid starch glue (11–15 kg per 1000 kg liquid starch glue).
- Developed to bring alkaline corrugating adhesives to maximum water resistance, with no dependence on the adhesive cooking method.

FDA Acceptable

CP-88/LH5EX is fully acceptable for FDA applications (per Regulation 21 CFR 175.105) as an additive to corrugating adhesive.

1.1–1.5% Dosage

Add to ready-for-use, caustic-catalyzed starch-based adhesives. Recommended dosage: 1.1–1.5% of the total liquid starch glue (11–15 kg per 1000 kg liquid starch glue).

Maximum Water Resistance

Developed to bring alkaline corrugating adhesives to maximum water resistance, with no dependence on the adhesive cooking method.

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