

Dry lamination adhesive

# UZIN PE 491

Water dispersion adhesive for paper with plastic foils lamination

## Applications:

Industrial use adhesive for bonding paper, carton or its derivatives with PET, OPP, LLDPE, as well paper to aluminum foil, mCPP and LLDPE. It is designed for use of food-packaging and non-food packaging applications too.

1-component, formaldehyde-free, acrylic adhesive that can be applied by conventional gravure cylinder coating techniques.

Suitable for / on:

- ▶ Several types of ink or varnish printed paper and its derivatives
- ▶ All types of cartons and their derivatives
- ▶ PET, OPP, LLDPE, aluminum foil, mCPP and LLDPE PP electrically treated (corona) or non-treated

## Product properties / advantages:

Water dispersion adhesive, mixture of aqueous dispersion of acrylic resin polymers, with high content to active solids. Dries fast and develops high strength at early drying stages. Suitable for machinery with high operating speed either by total surface spread or by spraying.

- ▶ Spreads easy
- ▶ Dries fast
- ▶ High shear strength
- ▶ Good thermal and moisture resistance

## Technical Data:

Packaging:	PE container, tank
Sizing:	30kg and 1000kg
Hazard:	-
Active solids:	43.5±0.5%
Color:	Milky/Transparent
Specific Gravity:	1,06kg/l
Application Temperature:	min 15°C (ASTM 2354)
Consumption:	Depends on application method
Viscosity:	3000-5000 mPas
pH:	6.0 – 6.5
FDA approval:	Yes
Storage:	Min. 6 months at cold and dry place ~20°C
Cleaning:	Wet film: cold water Dry film: hot water and/or detergent Stains/Pillages: UZIN OFFSET 395

\* At 20 °C and R.H.65%.

# UZIN PE 491

## Substrate preparation:

The bonding surfaces must be dry, clean, and free from dust and other substances that could impair adhesion. Study carefully technical data and safety data sheets of UZIN Hellas products.

## Application:

1. Place the container of adhesive indoors and let it be acclimatized, for 1-2 hours.
2. Ambient temperature and humidity must be within permissible limits. Ideal temperature conditions of application ranging from 18°C to 25°C. Do not apply adhesive at temperatures below 5°C and relative humidity greater than 60%.
3. Stir well the adhesive prior to application to homogenize well.
4. Keep always clean of the feeder bowl.
5. *Any dilution of the adhesive results in physical changes of the adhesion behavior: drying time, final adhesion strength, viscosity etc.* Even though in case of dilution: use clean water to a maximum percentage of 10% w/w. Always use a different clean container for the dilution and never use the initial adhesive container. Caution! Water contains Dilution water contains microorganisms, thus in a long stay in the container they are incubated and affecting biologically the adhesive, resulting to mold, or other unpleasant odors.
6. Always close tightly lids of the containers to prevent moisture loss and infections.
7. Clean tools and residues while still fresh. After hardening, residues could be removed by special solvent UZIN OFFSET 395.

## Consumption:

Consumption estimation
60-100 gr/m <sup>2</sup>
Depending on each substrate absorption

## Important Notes:

- ▶ Shelf life minimum 6 months when stored in a cool dry place in original packaging. Protect from frost and heat. Opened containers must be used quickly.
- ▶ Always carry out preliminary tests with all materials together, due to seldom discoloration phenomena of adhesion application onto unstable ink/varnish substrates.

## Protection of the workplace and the environment:

P101 If medical advice is needed, have a product container or label at hand. P102 Keep out of reach of children. P501 Dispose of the contents/containers in accordance with the current legislation on waste treatment.

EUH208 Contains 1,2-benzisothiazol-3(2H)-one, Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction. EUH210 Safety data sheet available on request.

Maximum V.O.C. content: 4,24 g/L (20 °C).

**Information for persons with allergies is available at Poison Center +30 210 7793777 (Greece).**

## Disposal:

Collect product residues wherever possible and reuse. Do not allow the sewer system, bodies of water or the soil to enter. Plastic containers emptied or scraped clean and no longer dripping from any residues can be recycled. Containers with liquid residues as well as collected liquid product residues are special waste. Containers with cured residues are construction / domestic waste.