

## **Serie of water dispersion varnishes with barrier properties – Labitex WB BARRIER.**

**Products are developed according to solution's implementation of Directive (EU) 2019/904 of the European Parliament and of the Council of 5 June 2019 on the reduction of the impact of certain plastic products on the environment.**



**Latvia, 2020.  
Chemist – technologist SIA Baltink - Jelena Petenko.**

## **Labitex WB 647 BB - barrier – blister varnish.**

**Glossy water-dispersion barrier varnish with barrier properties to food fats, oils and water, as well as the ability to heat seal. Designed to impart barrier properties with the simultaneous ability to heat seal disposable cups and food packaging, including packaging for direct contact with food.**

### **Main characteristics of product:**

- Barrier properties to the water.
- Barrier properties to the greases.
- Barrier properties to air moisture.
- Possibility to use for direct contact with food
- Possibility to heat seal.
- 100% biodegradable.
- Cardboard coated by product is recyclable.

### **Types of produced products :**

- Disposable cardboard cups.
- Cardboard packaging for food.
- Disposable dishes for food.

### **.Physical characteristics:**

Flash point:	> 100°C
Viscosity (20°C):	45 ± 5 (DIN-4)
Solid content:	45 ± 3%
pH:	7.9±0,2
Gloss(60°):	> 70
Slip:	Low
Rub resistance:	Good
Hot stamping:	Jes
Glueability	Jes
(without special glue):	
Freeze stability:	No

## **General recommendations for use of barrier - blister varnish Labitex WB 647 BB.**

### **1. Substrates.**

Cardboard and paper.

### **2. Layer guidelines.**

Drawing varnish in a line on an offset printing machine, it is necessary to apply a maximum layer of varnish (minimum 12 g / m<sup>2</sup>), it is necessary to apply waterbased primer as the first layer. If it is impossible to achieve the required minimum layer (minimum 12 g / m<sup>2</sup>) in one run, it is necessary to apply second layer to obtain the desired result.

### **3. Mashine mode.**

All components of the machine, including shafts and hoses must be adapted to work with water materials. The temperature in the foot should be controlled (not higher than 30 ° C) to avoid overheating and sticking.

### **4. Equipment for heat sealing.**

Depending on the thickness of layer of applied varnish and condition of the cardboard, it is necessary to adjust temperature, speed and pressure of the equipment. Forming bottom of disposable cups, it is very important to take into account the loss of temperature transferred from the heating element of the heat-sealing equipment through three layers that forms the bottom of the cup. It is necessary to achieve the activation of temperature of the barrier - blister varnish during heat sealing of three layers of cardboard around the circumference of formation of disposable cup bottom.

### **5. Storage of cardboard sheets or cardboard rolls, covered by barrier-blister varnish.**

Cardboard sheets or rolls printed and varnished by barrier-blister varnish before heat sealing should not be stored for longer than 6 months from the moment of varnishing. Humidity in the stack of cardboard sheets or in rolls of cardboard should not fall below 50% of relative humidity. Humidity above of 60% also negatively affects on heat sealing and storage.