

# Features and Applications of Fragile Label

## Detail Introduction :

What is Fragile paper?

Material properties of Fragile paper

The main purpose of Fragile paper

## What is Fragile paper?

Fragile paper self-adhesive label is an essential kind of self-adhesive label. The breaking strength of its fabric is far lower than that of adhesive. It can not be stripped entirely and reused after pasting. Fragile label self-adhesive surface materials are processed through printing, die-cutting, and other processes to make fragile labels or stickers, also known as commodity fragile quality assurance stickers. It is mainly used in unconventional commodity identification methods that are difficult to guarantee accurately by formal quality assurance.

Content:

Material properties

Main purpose

Matters needing attention

## Material properties of Fragile paper

**1.Bbb fragile paper:** the paper surface is delicate and difficult to discharge waste. The thickness of face paper is 0.07mm, which is suitable for small labels.

**2.BBL fragile paper:** the paper surface is delicate and can be discharged manually. The face paper is 0.1mm thick, suitable for round, rounded, special-shaped labels and various medium-sized labels, convenient for customers to tear, paste and use. BL fragile paper: the paper surface is slightly tender and suitable for waste discharge. The thickness of the face paper is 0.1mm. It is ideal for all kinds of large labels and machine labeling.

**3.Transparent, fragile paper:** the thickness of face paper is 0.1mm, and the paper surface is slightly tender, suitable for waste discharge. Thickened delicate piece: the paper surface is fragile and easy to discharge waste. The thickness of face paper can reach 0.14mm.

**4.Smooth and fragile paper:** the paper surface is as smooth as powdered paper. The thickness of the face paper is 0.1mm. The color changes quickly when it meets water: This product has a dual anti-counterfeiting effect, which has the characteristics of tear resistance of fragile paper—the attributes of color change when it meets water. Now the natural color of this product is red, or you can customize the color according to your requirements, which is generally dark. When it meets water, the background color of the previous label will become lighter, Until it turns white.

**5.Warm and fragile paper:** This product has a dual anti-counterfeiting effect, which has the anti-tear characteristics of the delicate piece and has the characteristics of discoloration in case of temperature change. Now the natural color of this product is pink and pink green. When the temperature reaches more than 60 °, the label color will turn white. When the temperature returns to room temperature, The color of the label will change to its natural color. The base paper of fragile paper is divided into 160g thick base paper and 80g grain base paper.

**6.The RFID fragile label:** it adopts special fragile paper and anti transfer glue, and the tag antenna removes the pet layer to realize the effect that the RFID fragile label cannot be peeled normally after pasting, anti-transfer, and anti tear. After it is pasted on the article, the antenna will automatically break when it is uncovered. Therefore, it plays an anti-counterfeiting role. It is mainly used in the anti-counterfeiting and traceability fields such as precious articles, tobacco, and wine.

RFID fragile tags can effectively prevent heat transfer. The original double-sided antenna coil adopts high-precision aluminum etching, which ensures the consistency between products and improves the

quality of labels compared with printed antenna labels and semi printed semi aluminum (copper) etching antenna labels; The distance between aluminum and aluminum in the label is relatively consistent and not easy to fracture, which ensures the relatively consistent resistivity in the label, making the label information transmission, reading and writing stable and fast.

## **The main purpose of Fragile paper**

The raw materials on the surface of fragile paper have extremely fragile characteristics, and high-strength adhesives with bonding ability are applied, and their bonding ability is much higher than the breaking strength of the surface materials. The surface materials of fragile paper self-adhesive labels are produced and processed through printing, film cutting, and other process procedures, and the fragile stickers can not be completely removed when they are posted on the goods. Further, it prevents counterfeiters from using genuine trademarks to sell fake and shoddy goods.

Fragile paper self-adhesive labels are mainly used for unconventional commodity identification methods that cannot be accurately guaranteed by formal and reliable quality assurance methods. It is mainly used in smartphones, telephones, computer accessories, automotive appliances, alcohol, medical drugs, food, skincare cosmetics, and art performance tickets. The quality assurance of other high-end merchants can also be applied to the anti-theft and anti-counterfeiting of commodities in shopping malls. The characteristics of warranty products are high priced, large warranty obligation, and high accuracy of warranty date. Therefore, the product quality of fragile stickers can be directly related to the product quality of product after-sales service. It can reasonably and effectively prevent all kinds of disputes and protect the interests of merchants.

## **Matters needing attention of Fragile paper**

As a special process processing anti-counterfeiting material, it has low tensile strength, is easy to break, has shrinkage, and certain requirements for temperature, humidity, and storage period. In application, it is generally used as an anti-counterfeiting label. According to the difference of backing paper, it is divided into thin backing paper and thick backing paper.

### **1. Thin backing fragile paper self-adhesive surface material**

The thin backing paper fragile paper self-adhesive surface material is suitable for printing and processing in the form of barrel paper on the label machine. Due to the low strength of surface material, fragile paper only prints and dies without waste discharge; Finished product labels are only cut and not rewound. Therefore, fragile paper self-adhesive labels cannot be automatically labeled, and they are all labeled manually.

The self-adhesive surface material of thin base paper fragile paper should not be printed in the form of a single sheet because the surface material shrinkage will be accelerated after the drum material is cut, resulting in the deformation of the base paper, the formation of a gap between the base paper and the surface material, and the overflow of glue solution affected by the environment, resulting in the fracture of the surface material during printing processing, resulting in the increase of waste labels and increased loss.

Resin ink relief printing and flexographic water-based ink printing are recommended for drum fragile paper surfaces.

### **2. Thick base paper fragile paper self-adhesive surface material**

The base paper thickness of thick base paper fragile paper self-adhesive surface material is generally 120g-220g / m<sup>2</sup>. Due to the thickness of the base paper, the shrinkage of the surface material will not cause the deformation of the base paper but only the shrinkage around the surface material.

The thick base paper types fragile paper self-adhesive surface material can be cut into single sheets and printed. The printing forms are offset printing, embossing, and screen printing.

Manual waste discharge or no waste discharge after die-cutting.

As the fragile paper self-adhesive label surface material has the characteristics of easy shrinkage, the processor shall print immediately after purchasing the material, which is not suitable for long-term storage; In case of surface material shrinkage and edge glue overflow during printing, the paper feeding speed shall be appropriately slowed down to avoid excessive stripping force, resulting in material edge fracture and edge tearing.