



## **Technical Data Sheet for Food-Grade Water-Based Ink**

Food-grade ink refers to ink used on printed materials that come into direct or indirect contact with food, such as food packaging, containers, and labels. This type of ink must comply with specific safety standards to ensure it does not pose any risk to human health. Below are some typical applications of food-grade ink:

### **Applications**

#### **1. Food Packaging**

- Paper boxes: e.g., milk cartons, juice boxes.
- Paper bags: e.g., bread bags, cake trays, pastry bags.
- Plastic bags: e.g., candy wrappers, snack packaging.
- Metal cans: e.g., biscuit tins, tea canisters.
- Glass bottles: e.g., sauce bottles, condiment containers.

#### **2. Food Service Products**

- Paper cups: e.g., cold and hot beverage cups.
- Disposable tableware: e.g., paper plates, paper bowls.



- Napkins: e.g., paper napkins, wet wipes.

### **3. Labels**

- Food labels: e.g., labels indicating ingredients and nutritional information.
- Anti-counterfeit labels: e.g., labels used for brand protection.

### **4. Direct Food Contact Containers**

- Plastic containers: e.g., food storage boxes, takeaway containers.
- Paper containers: e.g., cake boxes, dessert boxes.

### **5. Pharmaceutical Packaging**

- Medicine boxes: e.g., packaging for pharmaceutical products.
- Medicine bottles: e.g., bottles for liquid medications.

### **6. Personal Care Product Packaging**

- Shampoo bottles: e.g., labels on shampoo and conditioner bottles.
- Body wash bottles: e.g., labels on body wash containers.



## **7. Cosmetic Packaging**

- Lipstick tubes: e.g., printing on lipstick casings.
- Cosmetic bottles: e.g., labels on cosmetic containers.

## **Technical Characteristics**

### **1. Safety**

- Complies with food safety standards such as U.S. FDA regulations and EU directives.
- Non-toxic, harmless, and free from heavy metals or other hazardous substances.

### **2. Durability**

- Excellent abrasion and scratch resistance to maintain print clarity.
- Resistant to water, oil, and chemicals.

### **3. Environmental Friendliness**

- Low VOC emissions, meeting environmental requirements.
- Recyclable or biodegradable.



#### **4. Printability**

- Suitable for various printing methods, including flexography, offset, and screen printing.

#### **5. Color Stability**

- Vibrant colors with long-term stability.

#### **Precautions**

- Ensure the selected food-grade ink complies with relevant food safety standards.
- Follow proper storage and usage guidelines to avoid food contamination.
- Regularly inspect printing equipment to ensure smooth ink flow and print quality.

#### **Standards and Certifications**

- International Standards: e.g., ISO 9001 (Quality Management System), ISO 14001 (Environmental Management System).
- Food Safety Standards: e.g., U.S. FDA standards, EU



regulations.

- Industry Standards: e.g., German LFGB standards, Chinese GB standards.

## Technical Parameters

- Solid Content: 30%-40%
- Viscosity: 18"  $\pm 8$  (Rigosh #4 cup)
- pH Value: 7.5–9.0 (@25°C)
- Gloss: 40°–60° (black and white cardstock)
- Dilution: Can be diluted with compatible reducers or pH adjusters.
- Cleaning: High-strength cleaners can be used for anilox rollers, printing plates, and printing machines.
- Storage: Store in a cool, dry place at room temperature. Do not refrigerate. Keep sealed. Shelf life is one year from the production date.

## Usage Instructions

- Stir thoroughly before use.