



**FLOZEIN PRODUCTS**  
*a Flo Chemical Corporation company*

## **FloZein Quick-Release and Anti-Stick Agents for Gummies and other Molded Products**

Traditional gummy products are manufactured by depositing into a starch mold. After the pieces have cured, they are emptied from the molds, the starch is cleaned and the final pieces treated with a special oiling agent coating to give them a superb gloss and prevent them from sticking to each other or the equipment and packaging.

The FloZein line of *Oiling Agents* have been specially formulated to ensure the optimal effectiveness at a low usage level. Specialized manufacturing allows for these products to be used at room temperature without the need for heating. They incorporate various oils and waxes to optimize the gloss and anti-sticking properties of the pieces. The FloZein Oiling Agents can be utilized in either an oiling drum or conventional pan.

Gummies that are used as supplements or to carry other active ingredients, are produced using a “starchless” system, where the gummies are formed using plastic, silicon, or other similar molds. These molds require a special *Release Agent* to ensure that the pieces properly release from the molds after curing and minimize the scrap.

The FloZein products utilize ingredients that meet the labeling requirements of today’s scrutinizing consumer. Our US-based developmental labs have the capabilities to customize formulations and perform application testing.

### **FloZein Oiling Agents**

Anti-Stick 300 -- Coconut oil and Carnauba Wax

### **FloZein Release Agents**

Quick-Release 75 – Coconut oil and Sunflower lecithin

## **Application Instructions:**

### **Preparation**

Minor separation is normal if the product sits for an extended period. The FloZein release and oiling agents should be mixed for 5 minutes prior to use (once/shift). The oiling agents can be added to the holding vessel on the oiling drum, pumped directly out of the FloZein drum, or ladled in the case of batch processing. It is important that standard procedures are followed to remove the starch from the pieces prior to oiling.

### **Release Agent:**

Spray or brush a minimal amount of the FloZein into the molds prior to depositing. It is important that only a release agent is used in the molds and not the oiling agent.

### **Oiling agent:**

### **Oiling Drum:**

The standard application rate for the FloZein oiling agent is 0.10% - 0.20% by weight of the product to be oiled (1.0-2.0 g/kg). The product should be metered into the drum simultaneously with the cleaned pieces. The drum should have flights, and the speed and angle should be such that there is a minimum of 5 minutes residence time in the oiling drum. Upon exiting the drum, the product should be completely and consistently oiled, and ready for packaging.

### **Conventional Pan:**

The cleaned pieces are placed into a clean, ribbed pan according to the capacity of the pan itself. Apply approximately 0.15% - 0.25% by weight of the FloZein oiling agent (1.5g – 2.5g per kg) to the pieces as they are rotating in the drum. Allow the pieces to continue rotating for 5-10 minutes to ensure that all pieces are consistently oiled. The product is now ready for packaging.