

# TECHNICAL DATA SHEET

## Monopropionin

*Feed Grade Organic Ester Acidifier and Feed Hygiene Support Additive for Animal and Aquaculture Feed*

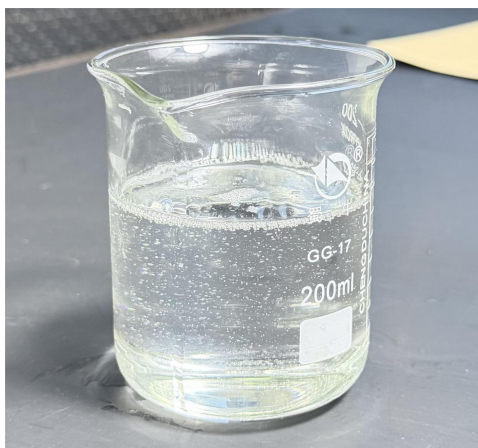
### Product Description

Monopropionin is a feed grade organic ester product supplied as a colorless to light yellow transparent liquid. It is designed for use in compound feed, premixes, liquid feed systems, and aquaculture feed as an acidifier, feed hygiene support ingredient, and propionic acid source. Compared with free propionic acid, esterified propionic acid ingredients can offer improved handling characteristics and more gradual functional release in feed applications. Monopropionin is suitable for feed programs focused on feed freshness, digestive environment management, and stable animal performance. It can be incorporated into formulations for poultry, swine, ruminants, pet food, and aquatic species according to nutritional objectives, processing conditions, and local feed regulations.

### 1. Product Identification

|                   |   |
|-------------------|---|
| Product Name      | Monopropionin   |
| Chemical Name     | Glyceryl propionate / Glycerol monopropionate based ester product                     |
| Grade             | Feed Grade  |
| Appearance        | Colorless to light yellow transparent liquid  |
| HS CODE           | 291550  |
| Primary Function  | Organic ester acidifier for feed hygiene support and digestive environment management |
| Recommended Field | Compound feed, premixes, liquid feed, pet food, and aquaculture feed                  |
| Typical Packing   | 1000 kg IBC drum or according to customer requirement                                 |

|         |              |
|---------|--------------|
| Packing | 1000KGS/DRUM |
| 20' FCL | 20MT         |
| 40' FCL | 28MT         |



## 2. Typical Specification

| Items                     | Standard                                     |
|---------------------------|--|
| Appearance                | Colorless to light yellow transparent liquid |
| Assay                     | 50.0% min                                    |
| Glyceryl dipropionate     | 25.0% max                                    |
| Tripropionin              | 5.0% max                                     |
| Free propionic acid       | 1.0% max                                     |
| Water content             | 0.2% max                                     |
| Total Ester               | 70.0% min                                    |
| Propionic acid equivalent | 30.0% min                                    |

## 3. Applications and Benefits

### Acidification support for digestive environment management

Monopropionin can be used in feed as an organic ester acidifier to support digestive environment management in animals. A stable digestive environment is important for nutrient utilization, feed intake, and normal growth, especially when animals face stress from feed transition, weaning, stocking density, temperature change, or transport. As an esterified propionic acid ingredient, Monopropionin provides formulation flexibility for nutritionists who need acidification support without relying only on free organic acids. It can be used together with protein sources, minerals, enzymes, probiotics, yeast products, and other functional feed additives. Proper inclusion should be determined according to animal species, growth stage, diet composition, processing method, and local feed regulations.

### Feed hygiene and freshness support during storage and transport

Monopropionin is suitable for feed programs where freshness, storage stability, and hygiene support are important quality objectives. Feed raw materials and finished feeds may be affected by moisture, warm storage conditions, long transportation, or variable ingredient quality. Propionic acid based products are commonly selected in feed systems to help manage feed hygiene and reduce the risk of quality deterioration. Monopropionin can be incorporated into compound feed, premixes, liquid feed, and other feed preparations when uniform distribution is required. It should be used together with good manufacturing practices, moisture control, clean equipment, suitable packaging, and appropriate warehouse management to help maintain consistent feed quality from production to final use.

### Application in livestock and poultry feed formulas

Monopropionin can be applied in poultry, swine, and ruminant feed formulas where acidification, feed quality, and digestive support are key formulation goals. In poultry diets, it may be used as part of a broader feed hygiene program for broilers, layers, and breeders. In swine diets, it can support formulas designed for young animals, growing pigs, and feed transition stages where intestinal comfort and feed intake are important. For ruminants, it may be incorporated into concentrates, premixes, or complete feed when compatible with the feeding system. Uniform mixing, proper dosage evaluation, and compatibility with other acidic ingredients should be considered to ensure stable finished feed quality.

### Use in aquaculture feed and liquid feed systems

## **TIANJIN HUGE ROC ENTERPRISES CO., LTD**

1806, HUIJIN CENTRE, 65 DAGU BEILU, TIANJIN CHINA, 300041

---

Monopropionin is also suitable for aquaculture feed and liquid feed applications where ingredient stability, feed hygiene, and digestive environment support are important. Aquaculture feeds such as extruded pellets, sinking pellets, and shrimp feed require stable quality during production, storage, and feeding. Liquid feed systems may also benefit from organic acid ester ingredients when product handling and uniform distribution are required. In practical use, attention should be paid to mixing sequence, compatibility with binders, oils, coatings, vitamins, minerals, enzymes, and heat-sensitive ingredients. The product should be stored away from moisture, direct sunlight, and incompatible substances to maintain quality before use in final feed formulations.

### **4. Packaging, Storage, and Shelf Life**

Standard packaging: 1000 kg net IBC drum, or according to customer requirement.

Storage: Keep tightly closed in a cool, dry, clean, and well-ventilated warehouse. Avoid moisture, heat, direct sunlight, strong oxidizing agents, strong alkalis, and contamination with odorous or incompatible materials.

Shelf life: 24 months from production date under recommended storage conditions in original unopened packaging.