

Refined Soybean Oil Fatty Acid IV120

I. Performance Characteristics

1. Chemical Activity: Moderate iodine value endows it with good chemical activity. The unsaturated double bonds can participate in various reactions such as oxidation, hydrogenation, and esterification, making it suitable for industrial scenarios with specific requirements for reaction activity.

2. Stability: Compared with high-iodine-value fatty acids, it has stronger antioxidant capacity. During storage and use, the acid value changes relatively slowly, reducing the risk of quality degradation caused by oxidative rancidity.

3. Solubility: Insoluble in water, but easily soluble in organic solvents such as ethanol, ether, and chloroform, which facilitates dispersion and application in processes like chemical synthesis and coating preparation.

II. Application Fields

1. Chemical Raw Materials

(1) Surfactants: React with alcohols and amines to produce surfactants such as fatty acid esters and fatty acid amides, which are widely used in detergents, textile printing and dyeing auxiliaries, oilfield chemicals, etc., playing roles in emulsification, dispersion, and washing.

(2) Coatings and Inks: As a resin raw material, it participates in the synthesis of alkyd resins and polyester resins to improve the drying speed, hardness, and gloss of coatings; in inks, it adjusts fluidity and adhesion to enhance printing quality.

(3) Plastic Industry: Used as plastic plasticizers and lubricants, it can improve the flexibility and processing performance of plastics such as polyvinyl chloride (PVC) and polystyrene (PS), reducing production costs.

2. Bioenergy

Bio-diesel is prepared through transesterification. Its moderate degree of unsaturation gives bio-diesel good low-temperature fluidity and combustion performance, reducing engine carbon deposition and exhaust emissions, making it an ideal renewable energy raw material.

III. Quality Standards and Storage

1. Quality Indicators

Packing: 20MT net/Flexitank

Item	Test Method	Qualified Value
Appearance	Visual	Liquid 25°C Conform
Colour(Fe-Co)	GB/T1722	3 Max
Acid Value(mgKOH/g)	GB/T9104.3	195-207
Iodine Value(gI ₂ /100g)	GB/T9104.1	120 Min
Saponification Value(mgKOH/g)	GB/T9104.2	196-208
Solidifying Point(°C)	GB/T9104.5	30 Max
Moisture(%)	GB/T9104.6	0.3 Max

2.Storage Precautions

(1)Environmental Requirements: Store in a cool, dry, and well-ventilated warehouse, avoiding direct sunlight and high temperatures. The storage temperature is recommended to be controlled below 20°C.

(2)Container Selection: Use sealed containers made of stainless steel or plastic to prevent oxidation from air contact; avoid direct contact with metals (such as iron) to prevent metal ions from catalyzing oxidation reactions.

(3)Regular Testing: Regularly detect the acid value and iodine value of the stored products. If abnormal indicators are found, take timely measures to prevent product deterioration.

