



TECHNICAL DATA SHEET

Epoxidized soybean oil(ESBO)

Descriptions:

-Formula: C₅₇H₁₀₆O₁₀; Formula weight:950 CAS No.8013-07-8

- **ESBO** is a collection of organic compounds obtained from the epoxidation of soybean oil;

-They are used as a plasticizer and stabilizer in polyvinyl chloride (PVC) plastics;

-ESBO is an yellowish viscous liquid;

-It serves as a plasticizer and a scavenger for hydrochloric acid released when the PVC degrades thermally;

-Soluble in hydrocarbons, ketones, esters, alcohols and other organic solvents, slightly soluble in ethanol;

-ESBO and PVC resin has good compatibility, low volatility and mobility.;

-ESBO has the advantages of good thermal stability and light stability, water resistance and oil resistance is excellent, with good mechanical strength,weather resistance and electrical properties, and no toxicity;

Specifications:

Standards Items	Specification	ES213	ES215
Epoxide number, % ≥	6.5	6.6	6.8
Purity% ≥	99.5	99.9	99.9
Acidity, mgKOH/g ≤	0.5	0.35	0.30
Color (Pt-Co) ≤	170	130	120
Iodine number, % ≤	5	1.5	1.2
Flash point, °C ≥	280	282	285
Density, (20°C)/ (g/cm ³)	0.988-0.999	0.9985	0.9985
Solidifying point °C	-5	-8	-10

Applications:

Epoxy soybean oil can be used for all polyvinyl chloride(PVC) products. Such as various types of food packaging materials, medical products, all kinds of film, Sheet, pipe, refrigerator seal, artificial leather, floor leather, plastic wallpaper, wire and cable and other daily-use plastic products and so on, can also be used for special inks, liquid composite stabilizing agent. The use of 5-10 PHR epoxy soybean in the general PVC software products;

Packing: 200kg/drum;1000kg /ibc tank, /20ton/flexitank;

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