KLJ Group

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EPOXIDIZED SOYABEAN OIL (ESBO)

ESBO | KANAMOLL-620

Vegetable oil-based light coloured secondary plasticizer

Chemical Nature	Epoxidized soyabean oil	
	Chemical Name	: Epoxidized soyabean oil
	Trade Name	: ESBO | Kanamoll-620
	CAS No.	: 8013-07-8
	UN No.	: Not Applicable
	EINECS No.	: 232-391-0

Specification	Characteristics	Unit	Test Method	Value
	Appearance	---	Visual	Clear liquid
	Colour	HU	ASTM-D-1045-2008	Max. 150
	Specific Gravity (27°C)	---	ASTM-D-1045-2008	0.998 ± 0.002
	Oxirane Oxygen	Wt. %	ASTM-D-1652	6.2 ± 0.1
	Acid value	mg KOH/g	ASTM-D-1045-2008	1.0 ± 0.1
	Iodine Value	g/100 g	IS-548-2015	Max. 5.0
	Moisture + Volatiles	Wt. %	ASTM-E-203-2008	Max. 0.10
	Volatile Loss (130°C/3h)	Wt. %	KLJ-TM-P-11-92	Max. 0.20
	Heat Stability (150°C/2h)	HU	ISI-9591-2013	Pale yellow
Typical Properties				
	Viscosity, Ford cup B-4 at 27°C	Sec	---	130 ± 05
	Flash Point	°C	KLJTM	231
	Refractive Index (27°C)	--	ASTM-D-1045-2008	1.470 – 1.475

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Properties

Kanamoll is used as a co-plasticizer, and an acid scavenger in soft PVC process for hydrochloric acid liberated from PVC when PVC undergoes heat treatment and acts as a mercaptan/acid scavenger in many other applications, as well as a secondary heat and light stabilizer.
Due to low cost non-toxic and environmentally friendly properties, as well as biodegradability over traditional plasticizers partially replacing DOP (Dioctyl phthalate) in PVC applications.

Kanamoll is compatible with a variety of surface coating materials like PVC, PVA, nitro cellulose, chlorinated rubber etc. Being an acid acceptor, it imparts stability to coating formulations besides better resistance to extraction by soap, detergent and salt solutions.
It also partially imparts resistance to migration compared to conventional plasticizers in surface coating formulations. In addition, improves adhesion, toughness, gloss and chemical resistance of the film.

Kanamoll is used at a concentration of 2-5 PHR and up to 10% of the Plasticizer proved to give good result to plasticized PVA and for rigid PVC recommended concentration is 1-3 PHR.

Application

- Flexible PVC formulations
- As a co-stabilizing internal lubricant in Rigid PVC formulations
- Soya based inks
- Pesticides
- Insecticides
- As pigment dispersion agent
- As chemical intermediate
- Lubricants
- Cutting oils
- As an epoxy reactive diluent
- Functional fluids
- Fuel additives
- As a polyol replacement
- Agricultural and pharmaceutical molecules
- As a green carrier in flavor and fragrances
- In UV cure applications
- In surfactants
- Adhesives
- Sealants
- Coatings

Packing & Storage

Kanamoll is packed in 200/225 kg iron drum/ HDPE drum,20–22 fcl flexi tank or in road tanker.
It is stored in tightly closed container, in a cool, dry and ventilated area.

Shelf Life

It keeps the original characteristics minimum for 12 months, if kept in recommended storage

Safety

The MSDS can be provided on request.

Disclaimer

The data contained in this publication are based on our current knowledge and experience. During processing, there are so many factors which may affect the application part of Kanamoll, so these data neither imply any guarantee of certain properties, nor the suitability of the product for the specific purpose. Any data given in this publication may change without prior information and do not constitute the agreed quality of our product.

Total Solution in Plasticizers