

Coating additives for expandable polystyrene



PRODUCT NAME

Einar® 501

Einar® 515

Einar® 535

Einar® 543 and Einar® 544

APPLICATION

Anti-stat coating for EPS

Cooling time enhancer for EPS

Anti-stat and cooling time enhancer blend

EPS full blends of GMS/GTS/Zinc Stearate

Palsgaard®

The plant-based, food-grade coating additives for EPS

Palsgaard's **Einar**® polymer additives includes everything you'll need to create successful EPS products: Plant-based and food-grade anti-static additives and cooling time enhancers and blends of these.

We also offer all-in-one solutions complete with anti-static protection, cooling time enhancement and zinc stearate, offering a convenient way to apply EPS coatings.

Our services include full technical support based on many years in the industry of fine-sprayed glyceride esters.

KEY FEATURES

- ✓ Highly effective plant-based anti-static additives and cooling time enhancers for the EPS process
- ✓ High-quality fine-particle-sized glyceride esters of fatty acid esters from vegetable oils
- ✓ Custom-designed for EPS applications
- ✓ Worldwide regulatory approval for food-contact applications

KEY BENEFITS

- ✓ Excellent anti-static protection via coating
- ✓ Ready-to-use coating blends
- ✓ Fine powders with high coating efficiency
- ✓ Can be used for various EPS bead sizes by adjusting concentration
- ✓ Suitable for both EPS and XPS beads
- ✓ Consultancy and technical support available from our applications team

Einar® 501 for EPS anti-stat coating

Einar® 501 is an efficient vegetable-based GMS anti-stat that will help improve flow properties of EPS beads during storage, transportation and through the pre-expansion step as well as during screening and moulding by reduction of agglomerates and attraction to processing equipment.

Einar® 501 is a fine powder with excellent coating properties and the recommended use level is 0.1 - 0.6% depending on EPS bead size. Smaller beads require higher concentrations due to a higher specific surface area.

Einar® 515 for EPS cooling time enhancement

Einar® 515 is a plant-based GTS cooling time enhancer which will help reduce cycle times by facilitating a faster exchange of foaming agent and air in the moulding process.

Einar® 515 is a very fine powder and has high coating efficiency and should be used at loading levels of 0.1 - 0.4% to obtain the best performance on cooling time.

Einar® 535 for EPS anti-static and cooling time enhancement in one

Einar® 535 is combining GMS and GTS in one blend bringing the benefits of both components along with simplifying handling and processing.

Guidelines for use

The fine powder of **Einar® 501**, **Einar® 515** and **Einar® 535** is applied to the surface of the beads, leaving a thin functional coating.

Einar® 501 product details

Physical/chemical properties:	monoglyceride, min. 90% free fatty acids, max. 1.5% free glycerol, max. 1% melting point, approx. 68°C particle size average 50 µm colour off-white form at 25°C fine powder
Storage conditions:	Should be stored in a cool and dry place in tightly closed packaging
Packaging:	15kg / 33.1 lb net in carton with inner polyethylene bag
Product form:	Einar® 501 comes in fine powder form
Total shelf-life:	Min. 24 months

Einar® 515 product details

Physical/chemical properties:	triglyceride free fatty acids, max. 1% free glycerol, max. 1% melting point, approx. 60°C particle size average 50 µm colour off-white form at 25°C fine powder
Storage conditions:	Should be stored in a cool and dry place in tightly closed packaging
Packaging:	15kg / 33.1 lb net in carton with inner polyethylene bag
Product form:	Einar® 515 comes in fine powder form
Total shelf-life:	Min. 24 months

Einar® 535 product details

Physical/chemical properties:	monoglycerides 45 - 55% particle size average 50 µm colour off-white form at 25°C fine powder
Storage conditions:	Should be stored in a cool and dry place in tightly closed packaging
Packaging:	15kg / 33.1 lb net in carton with inner polyethylene bag
Product form:	Einar® 535 comes in fine powder form
Total shelf-life:	Min. 24 months

Einar® 543 and Einar® 544
full blends of GMS/GTS/Zinc Stearate

Einar® 543 and Einar® 544 are ideal solutions for EPS producers aiming to optimise production processes and improve the environmental profile of their products in one step.

These all-in-one solutions, complete with zinc stearate, eliminate the need to manage multiple individual components.

The ready-to-use pre-blends offer precise dosing, safer and faster handling, and opportunities for streamlining additive inventory – making production more efficient and resource-conscious.

Einar® 543 and Einar® 544 are blends of GMS, GTS with varying zinc stearate content. It is often a matter of the producers specific processing and handling whether more lubrication in the form of a higher zinc stearate content is needed.

Guidelines for use

The fine powder of Einar® 543 and Einar® 544 is applied to the surface of the beads, leaving a thin coating carrying all the functional benefits in one.

Einar® 543
product details

Physical/chemical properties:	mix of GMS/GTS/zn. st.	
	monoglycerides	40 - 45%
	zinc stearate, approx.	15%
	particle size average	40 µm
	colour	off-white
Storage conditions:	form at 25°C	fine powder
	Should be stored in a cool and dry place in tightly closed packaging	
	15kg / 33.1 lb net in carton with inner polyethylene bag	
	Einar® 543 comes in fine powder form	
	Min. 24 months	

Einar® 544
product details

Physical/chemical properties:	mix of GMS/GTS/zn. st.	
	monoglycerides	35 - 40%
	zinc stearate, approx.	25%
	particle size average	30 µm
	colour	off-white
Storage conditions:	form at 25°C	fine powder
	Should be stored in a cool and dry place in tightly closed packaging	
	15kg / 33.1 lb net in carton with inner polyethylene bag	
	Einar® 544 comes in fine powder form	
	Min. 24 months	



Plant-based, food-grade solutions for the polymer industry

Health and Safety

Einar® polymer additives are safe to use, identified as non-toxic and not expected to cause irritation to the skin, eyes or lungs. They are made from renewable, plant-based material under hygienic conditions. SDS is available on request.

Legal status and other regulatory information

Einar® 501, Einar® 515, Einar® 535, Einar® 543 and Einar® 544

- Food contact compliance for EU, USA, Mercosur, China
Detailed information available on request