

EINAR® PLANT-BASED, FOOD-GRADE POLYMER ADDITIVES

Colour dispersion aid for masterbatches



PRODUCT NAME

Einar® 103

APPLICATION

Colour masterbatches for
PE, PP, PET, PVC, and PA

Palsgaard®

The plant-based, food-grade dispersing agent for PE, PP, PET, PVC, and PA colour masterbatches

Einar® 103 is an innovative plant-based and food-grade dispersing aid which ensures optimum distribution of pigments, fillers and other additives, delivering outstanding performance when compared to market-standard products.

KEY FEATURES

- ✓ Highly effective plant-based replacement of petrol-based waxes
- ✓ Speciality polyglycerol ester based on fatty acids of vegetable origin
- ✓ Suitable for a variety of polymers, including PE, PP, PVC, PET, and PA
- ✓ Worldwide regulatory approval for food-contact applications

KEY BENEFITS

- ✓ Superior pigment dispersion
- ✓ More intense colours meaning less pigment needed
- ✓ Strong cost-in-use profile compared to petrol-based wax
- ✓ Lower filter pressure sustaining a stable production and consistent product quality
- ✓ No worries when used in food-contact applications
- ✓ Consultancy and technical evaluations available from our applications team

Einar® 103 for colour masterbatches

Einar® 103 is a liquid plant-based dispersing agent designed to deliver outstanding performance for pigments in polyolefin products as well as PET, PVC and PA.

Einar® 103 offers a unique opportunity for cost savings. Its effectiveness in dispersing pigments will result in lower pigment loadings needed to obtain the desired colour strength. The measurable result is optimised wetting, higher colour yield, and reduced filter pressure.

With the efficiency of **Einar® 103**, it is possible to increase the pigment concentrations in a masterbatch, providing additional cost benefits. **Einar® 103** also adds a lubricating effect, resulting in better process control, and higher extruder throughput.

Tested to perfection

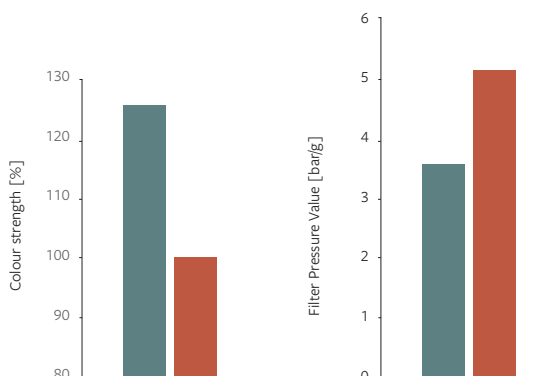
Tests of the performance of **Einar® 103** have shown the superior performance of this dispersing aid when measured against industry-standard waxes:

- By substituting PE wax with **Einar® 103**, the pigment concentration can easily be reduced by 25% while achieving a better colour strength and lowered filter pressure value
- By replacing just 1% PE wax with **Einar® 103**, a significant increase in colour strength and decrease in filter pressure can be observed

DISPERSION WITH EINAR® 103

Pigment Blue 15:3 in LLDPE measured with a 20 µm filter

- 30% pigment, 10% Einar® 103
- 40% pigment, 10% PE wax



Einar® 103 product details

Physical/chemical properties:	polyglycerol ester	
	acid value, max.	max. 3 mg KOH/g
	saponification value	170-210 mg KOH/g
	colour	yellowish
	form at 25 °C	liquid
Storage conditions:	Should be stored in a cool and dry place in tightly closed packaging	
Packaging:	200 kg / 440.9 lb net in steel drum and 975 kg / 2149.5 lb net in intermediate bulk container (IBC)	
Product form:	Einar® 103 comes in liquid form	
Total shelf-life:	Min. 24 months	

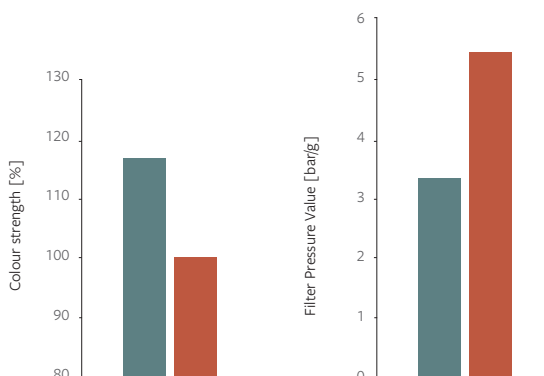
Guidelines for use

Einar® 103 should be incorporated into the polymer matrix via a colour masterbatch. **Einar® 103** will then enable a uniform and homogeneous dispersion of individual pigment particles in the polymer.

BOOST YOUR PE WAX WITH EINAR® 103

40% Pigment Blue 15:3 in LLDPE measured with a 20 µm filter

- 40% pigment, 19% PE wax + 1% Einar® 103
- 40% pigment, 20% PE wax



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® 103

- Is a dual use additive for use in plastics and in food
- Complies with the purity requirements of food additives (FAO, WHO, JECFA)
- Food contact approval for EU, USA, Mercosur, China
Detailed information available on request