

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

BRINGING GOOD THINGS TOGETHER

Palsgaard®

The plant-based, food-grade solution 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
- ✓ Custom-designed for colour masterbatches
- ✓ 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
- ✓ Strong cost-in-use
- ✓ More reliable and stable production that will keep downtime at a minimum
- ✓ Less pigment needed to obtain true colours
- ✓ No worries when used in food-contact applications
- ✓ Consultancy and technical evaluations available from our applications team

EINAR® PLANT-BASED, FOOD-GRADE POLYMER ADDITIVES

Einar® 103 for colour masterbatches

Einar® 103 is a liquid plant-based dispersing additive designed to deliver outstanding dispersing 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

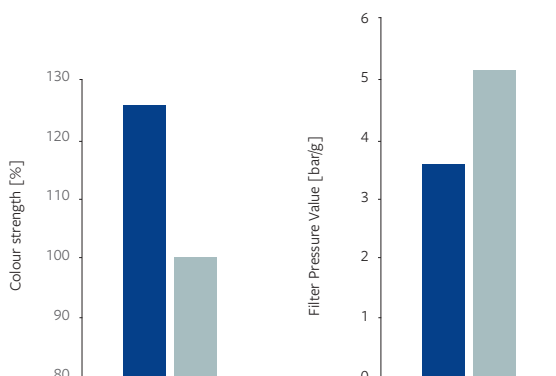
Tests of the performance of **Einar® 103** have shown the superior performance of this dispersing aid when measured against industry-standard waxes:

- By substituting PE wax with **Einar® 103**, the pigment concentration can easily be reduced by 25% while achieving a better colour strength and lowered FPV
- 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. | |
| | colour form at 25°C | 3% yellowish viscous 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 | |

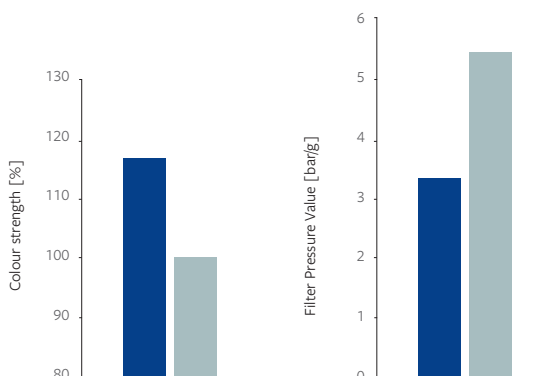
Guidelines for use

Einar® 103 should be incorporated into the polymer matrix via a colour masterbatch. As a liquid dispersing aid, **Einar® 103** will coat the pigment and 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



Sustainable solutions for the polymers industry

Health and Safety

Einar® is identified as non-toxic and is not expected to cause irritation to the skin, eyes or lungs. Detailed MSDS is available on request.

Legal status and other regulatory information

Einar® 103

- is a dual use additive for use in food and polymers
- complies with the purity requirements of FAO/WHO regarding food additives (JECFA)
- is manufactured in accordance with EU regulations and under hygienic conditions
- may be used in plastic materials and articles intended to come into contact with foodstuffs in accordance with Regulation (EC) No. 10/2011 on plastic materials and articles intended to come into contact with food
- is GRAS according to GRAS notice Nos. 000009, 000179, 000266, and 000466, and may in accordance with FDA 21 CFR 174.5 be used as components of articles intended for contact with food
- Kosher & Halal certificates and REACH registration available on request

To find out more or to order samples of Einar® 103, visit polymers.palsgaard.com or contact us via polymers@palsgaard.com

BRINGING GOOD THINGS TOGETHER

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