

EINAR® PLANT-BASED, FOOD-GRADE POLYMER ADDITIVES

Mould release for polypropylene (PP) applications



PRODUCT NAME

Einar® 201

APPLICATION

Mould release for
R-PP, H-PP, and B-PP

BRINGING GOOD THINGS TOGETHER

Palsgaard®

The plant-based, food-grade solution for PP injection moulding applications

PP is a very versatile polymer used for many different purposes including medical and food packaging, appliances and a broad portfolio of everyday products. All of which requiring a good mould release to ensure a smooth production process and deformation-free products.

With **Einar® 201** you can overcome concerns over food safety and add a more sustainable profile to your injection moulded products without affecting costs or quality.

KEY FEATURES

- ✓ Highly effective replacement for mould release additives based on ethoxylated amines and amides
- ✓ A high quality glycerol monostearate made from vegetable oils
- ✓ An internal mould release additive for additive masterbatches based on polypropylene
- ✓ Especially well-suited for PP applications
- ✓ Worldwide regulatory approval for food-contact applications
- ✓ Produced in CO₂-neutral factories

KEY BENEFITS

- ✓ Excellent mould release performance across all PP grades
- ✓ Very good denesting and slip effect for stacked containers
- ✓ No worries when used in food-contact applications
- ✓ Efficient performer at low loading levels
- ✓ No adverse effects on mechanical, optical, and barrier properties
- ✓ Consultancy and technical evaluations available from our applications team

EINAR® PLANT-BASED, FOOD-GRADE POLYMER ADDITIVES

Einar® 201 for mould release applications

Einar® 201 is a very reliable general purpose mould release for PP injection moulding applications. The product can be dosed at an optimum concentration in both homopolymers, random and impact copolymers and will secure efficient release of moulded parts. **Einar® 201** has an ideal migration profile in PP that guarantees sufficient lubrication and will promote lower cycle times and continuous operation.

Einar® 201 is also an efficient denesting additive and allows easy separation of stacked parts. Recommended loading levels for homopolymers are 0.2-0.4%, for random copolymers 0.1 - 0.2% and for impact copolymers 0.3 - 0.5%.

Einar® 201 is available in both powder and pellet form providing options for better mixing with either powder or pelletized PP. The pellet form being preferred in many situations where a powder at elevated temperatures during mixing and feeding will be difficult to handle and transport in feeding and dosing equipment.

Einar® 201 product details

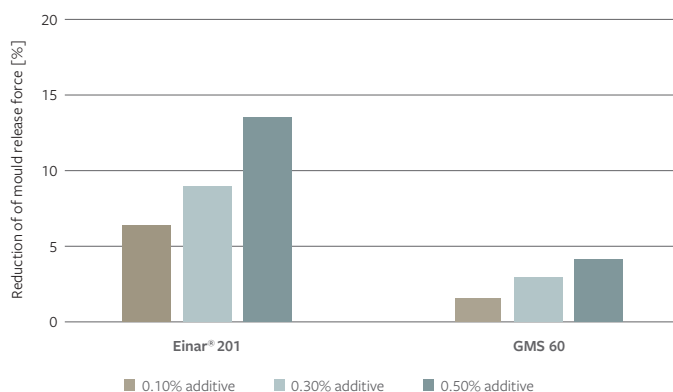
Physical/chemical properties:	monoglycerides, min.	90%
	free fatty acids, max.	1.5%
	free glycerol, max.	1%
	melting point, approx.	65 °C
	colour	off-white
	form at 25 °C	pellets or powder
Storage conditions:	Should be stored in a cool and dry place in tightly closed packaging	
Packaging:	20 kg multiply paper bag with an inner polyethylene bag (35 bags per pallet) or 500 kg or 800 kg anti-static polyethylene big-bag	
Product form:	Einar® 201 comes in both powder and pellet form	
Total shelf-life:	min. 24 months	

Guidelines for use

Einar® 201 can be incorporated into the polymer matrix via a masterbatch or by direct addition of the neat additive to the injection moulding process of plastic articles and packaging.

MOULD RELEASE PROPERTIES IN HOMOPOLYMER PP

Results are recorded in 20 MFI homopolymer PP.



Einar® 201 shows excellent performance in comparison to conventional GMS.

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® 201

- is a dual use additive for use in food (E471) and polymers
- complies with the purity requirements of FAO/WHO regarding food additives (JECFA)
- is manufactured in accordance with Danish- and 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 FDA 21 CFR 184.1505, and may in accordance with FDA 21 CFR 174.5 be used as components of articles intended for contact with food
- Roundtable of Sustainable Palm Oil (RSPO) certificate available on request with order
- Kosher & Halal certificates and REACH registration available on request

To find out more or to order samples of Einar® 201, visit polymers.palsgaard.com or contact us via polymers@palsgaard.com