



# The final piece of the PET puzzle

Unique slip performance for PET moldings  
with **IncroMax PET 100**

Could you benefit from a slip additive that decreases surface friction and mold release in your PET manufacturing process? If so, try IncroMax PET 100, Croda's unique additive for PET that instantly reduces surface friction without having any adverse effects on the physical properties of PET. It's the final piece of the puzzle you've been looking for!

**CRODA**  
Polymer Additives

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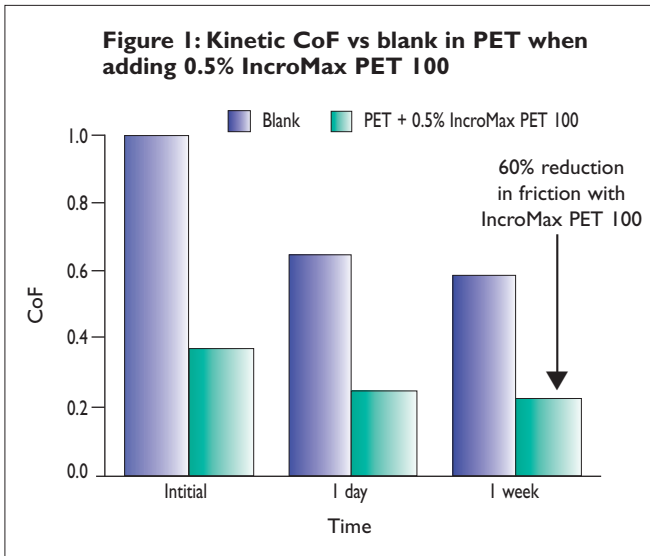
At the heart of better plastics

## Key Benefits of IncroMax PET 100

- Decreases surface friction and mold release force by 60%
- Improves the packing and processing of molded parts
- Reduces scratch and scuff and enhances surface quality
- Easier processing and reduced manufacturing noise
- No adverse effect on the physical properties of PET

## Reduced Surface Friction

**IncroMax PET 100** acts as a slip agent, rapidly reducing the static and kinetic friction on the surface of the PET. Tests have shown friction reduction results of 60%. This performance is long lasting, and achieved by adding as little as 1000ppm **IncroMax PET 100**.



## Easier Mold Release

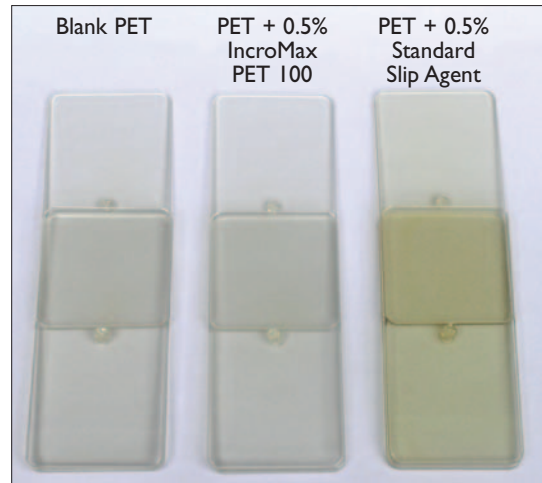
**IncroMax PET 100** delivers a reduction in mold release force of 60%. By allowing mold release at higher ejection temperature, the cycle time of production is reduced, and the number of shots per hour increased. **IncroMax PET 100** enables increased productivity and reduced waste in your business.

## Excellent Colour and Clarity

Results show that there is no visible difference between the colour of the blank PET and that containing the **IncroMax PET 100** additive. Colour and clarity are retained over the lifetime of the polymer.

**Figure 2: Colour of PET measured on Dr Lange Transmission Spectrophotometer**

	Time	L Value	a Value	b Value
Blank PET	Initial	94.6	-0.3	1.6
	4 Weeks	94.3	-0.3	1.5
PET + 0.5% IncroMax PET 100	Initial	94.1	-0.3	1.8
	4 Weeks	94.0	-0.4	1.6



**Figure 3: Molded PET plaques containing no IncroMax PET 100, 0.5% IncroMax PET 100 and 0.5% standard slip additive for colour comparison**

## No Effect on Physical Properties of PET

- Excellent colour and clarity
- No increase in acetaldehyde generation
- No effect on intrinsic viscosity
- No effect on injection pressure

## Bottle Manufacture

The high surface friction of PET causes delays and downtime in machinery, excessive noise and packaging difficulties. **IncroMax PET 100** increases the packing density of preforms by 25%, reduces scratching and waste, and can improve the line flow of the finished bottles. Reduce costs at every stage of the PET molding process with **IncroMax PET 100**.

## Addition

**IncroMax PET 100** is available as white pastilles in 25kg bags. Initial addition levels are typically 0.2 – 0.3%. It can be added directly to the throat of an injection molding machine using a cooled feeder. Alternatively a masterbatch can be produced or the material may be dispersed in a liquid colour carrier system.

## Applications



- Beverage bottles
- Household & cosmetic bottles
- Injection molded trays & tubs
- Food packaging
- PET film & extruded sheet

## Regulatory Information

The product is listed on EINECS and TSCA. Application for food contact approval under EU Directive 2002/72/EC and FDA CFR 21 is in progress.