



# Release the potential...

A new era in polystyrene processing begins with **IncroMax PS** slip additive

Are high surface friction and poor mold release holding your polystyrene manufacturing process back? If so, try IncroMax PS, Croda's new food approved additive designed specifically for use in polystyrene. It instantly decreases surface friction and mold release force leading to a range of product and efficiency improvements. Release the potential in your polystyrene process today!

**CRODA**  
Polymer Additives

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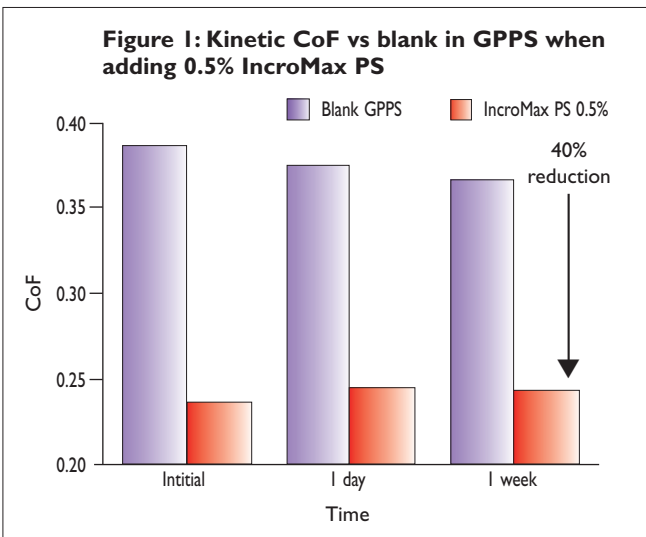
At the heart of better plastics

## Key Benefits of IncroMax PS

- Decreases surface friction and mold release force by up to 40%
- Improves packing and de-nesting of molded parts
- Reduces scratch and scuff and enhances surface quality
- Fewer rejected parts and less waste
- Easier processing and reduced manufacturing noise
- No adverse effects on the physical properties of polystyrene

## Reduced Surface Friction

**IncroMax PS** acts as a slip agent, rapidly reducing the static and kinetic friction on the surface of the polystyrene. Tests have shown friction reduction results of typically 36% in HIPS and 40% in GPPS. This performance is long lasting and achieved by adding as little as 0.5% **IncroMax PS**.



## Easier Mold Release

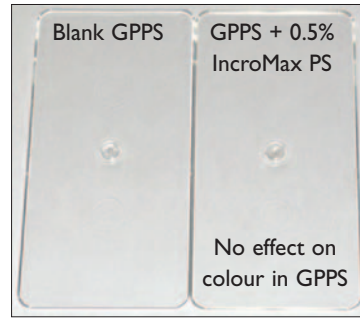
**IncroMax PS** delivers a reduction in mold release force of typically 20% in HIPS and 32% in GPPS. By allowing mold release at higher ejection temperature, the cycle time of production is reduced, and the number of shots per hour increased. **IncroMax PS** enables increased productivity and reduced waste in your business.

## Excellent Colour and Clarity

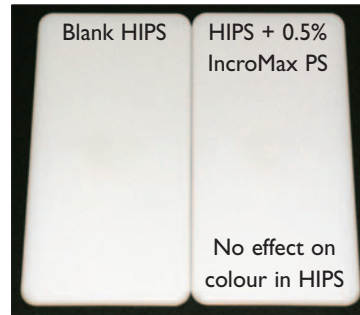
Results show that there is no visible difference between the colour of the blank polystyrene and that containing the **IncroMax PS** additive. Colour and clarity are retained over the lifetime of the polymer.

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

	L Value	a Value	b Value
Blank GPPS	95.6	0.0	0.4
GPPS + 0.5% IncroMax PS	95.5	0.0	0.4



**Figure 3: Molded GPPS plaques containing no IncroMax PS and 0.5% IncroMax PS for colour comparison**



**Figure 4: Molded HIPS plaques containing no IncroMax PS and 0.5% IncroMax PS for colour comparison**

## Easy to use

**IncroMax PS** is available in bead form and is supplied in 25 kg bags as standard. It can be added directly to the polymer at the processing stage, pre-compounded or included via masterbatch. Experience has shown that **IncroMax PS** can be easily incorporated into the polymer. Simple manual mixing prior to processing will normally give an acceptable dispersion, though mechanical means is preferable.

## Applications



- Cosmetic bottles and jars
- Food containers and trays
- CD cases
- Plastic furniture
- Plastic housewares

## Regulatory Information

**IncroMax PS** is manufactured from naturally derived vegetable based materials and is GM free. It is permitted for use in food contact plastics in the EC and has specific indirect food contact approval in the USA.

