



# When taste and odour matter most

For caps & closures choose **Incroslip**,  
low taste, low odour torque release additives

Are taste and odour just as important to you as slip performance? If so choose Incroslip, Croda's unique range of high performance, food approved release additives. They are specially designed for sensitive applications such as bottle closures, food packaging and medical plastics – when taste and odour matter most!

**CRODA**  
Polymer Additives

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At the heart of better plastics

## Low Taste, Low Odour Slip Additives

**Incroslip** is a range of specially developed, food approved slip additives with exceptional stability and low odour properties. Designed especially for the exacting demands of the bottled water industry, **Incroslip** is also recommended for all sensitive applications including food packaging and medical plastics.

**Incroslip** is manufactured using proprietary technology which removes oxidatively unstable components and precursors that may give rise to colour and odour, without compromising slip performance.

## Key Benefits of Incroslips

- Highest quality slip additives
- Low taste, low odour slip additives for sensitive applications
- Stability of colour, odour and taste in extreme conditions
- Dramatic improvement in oxidative stability without compromising slip performance
- Range of optimised combinations of slip and stability

## Product Selection

**Incroslip** provides a range of optimised combinations of slip and oxidative stability to suit the particular requirements of your application.

Product	High stability	Low odour	High slip
Incroslip C	*	*	***
Incroslip Q	**	**	**
Incroslip B	***	***	*

Key: \* = good \*\* = very good \*\*\* = excellent

## Applications and Addition

**Incroslip** is recommended for use in food packaging film, molded closures, liner compounds and plastisols, and is compatible with a wide range of polymers.

**Incroslip** is best incorporated via a masterbatch, compound or liquid colour system. Initial addition levels are 0.1-0.2% for film grades, 0.2-0.5% for HDPE/PP cap applications, and up to 1% for compression molding grades. **Incroslip** is provided as 100% active free flowing beads.

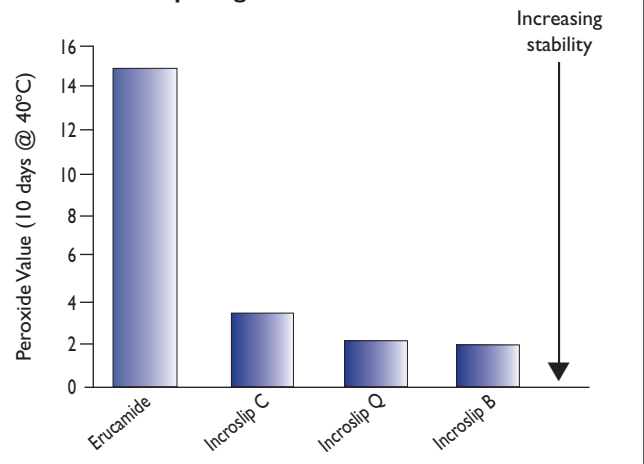
## Uncompromised Slip Performance

Slip additives are required to allow closures to be applied tightly to bottles yet still be easily removed. This is particularly vital for carbonated drinks where tight seals are necessary, and for sugary liquids. The slip additive also aids the molding and release of the cap in injection and compression molding processes. Traditional techniques to improve colour and odour stability can significantly reduce or destroy slip performance. **Incroslip** offers high colour and odour stability without compromising slip performance.

## Enhanced Oxidative Stability

Bottled water applications increasingly employ highly oxidative environments, including the use of ozone, to achieve closure sterilisation. Standard slip additives struggle to survive these conditions without beginning to break down. Oxidative degradation can typically lead to taste, odour and colour problems. **Incroslip** provides a breakthrough in oxidative stability resulting in odour reduction, very low colour, and superb colour stability without compromising slip performance.

Figure 1: Superior oxidative stability of Incroslip range



## Excellent Organoleptic Properties

Current torque release additives suffer from some taint, taste and odour issues, particularly in sensitive applications such as bottled water closures. Through extensive odour testing **Incroslip** has been shown to have significantly reduced odour compared with standard torque release additives. Copies of the odour study results and methodology are available on request.

## Regulatory Information

**Incroslip** is a range of proprietary blends of naturally derived, vegetable based materials and are GM free. They are permitted for use in food contact plastics in the EC and have specific indirect food contact approval in the USA (CFR21).

