

# ABRIL 9031

## Outstanding Slip Agent

A lubricant for thermoplastics based on ethylene-bis-oleamide. Capable of wide application, being equally suitable for polyolefins, polystyrene and polycarbonate. However, it is particularly suitable for use in applications requiring enhanced slip and anti-block characteristics such as EVA, PVC and polyolefin films and polyamides. Abril 9031 has a number of FDA food contact approvals making it suitable for use in many films and film coatings.

See also Abril 9031 "hot melt adhesive" data sheet

CAS No 110-31-6

EINECS No 203-756-1

### DESCRIPTION

- ✓ Lubricant for thermoplastics
- ✓ Ethylene-bis-oleamide
- ✓ Medium melting point
- ✓ Non-toxic
- ✓ F&DA approved for many food contact applications

### 1. THERMOPLASTIC FILMS (Ideal slip & anti-block agent)

Provides good anti-block and release performance in polyolefin films such as BOPP and in EVA film coatings.

### 2. CELLOPHANE

Abril 9031 performs well as an anti-static and anti-block additive in cellophane coatings at addition rates of 0.15 – 0.5% and in this role will aid rather than interfere with heat sealing operations.

### 3. POLYSTYRENE (Anti-static & anti-block)

Will lower the melt viscosity of polystyrene and greatly assist in the compounding of grades with differing melt flow index. Benefits are improved mould filling and reduced shrinkage through the use of lower temperatures while the properties of the base polymer remain virtually unaltered.

**OTHER APPLICATIONS INCLUDE:**

- ✓ Improved pigment dispersion and rapid wetting of fillers
- ✓ Wear and water resistance improved
- ✓ Reduces surface tack and blocking
- ✓ Reduced cleaning downtime on applicator heads
- ✓ Adhesive film more flexible at low temperatures
- ✓ Ensures uniform pigmented product

**Typical Properties**

<b>Melting Point</b>	112 °C
<b>Acid Value</b>	< 10 mg KOH/gm
<b>Specific Gravity</b>	0.99 g/cc
<b>Gardner Colour</b>	8 maximum
<b>Flash Point</b>	300 °C
<b>Thermal Stability</b>	Up to 240 °C

**Physical Form**

**Fine Powder:** A fine powder of discrete particles produced by centrifugal atomisation.

**Packaging**

Abril 9031 is supplied in 20 kg paper bags.

Optimum addition rates vary between 0.1% and 2.0% depending on the base polymers and performance level required.

Toxicological Status

<p align="center"><b>U.S. Food and Drug Administration (FDA)</b></p>	<p align="center"><b>British Industrial Biological Research Association (B.I.B.R.A.)</b></p>
<p>Regulated for use under the following -</p> <p>21 CFR</p> <p><b>175.300</b> Resinous and polymeric coatings  <b>175.320</b> Resinous and polymeric coatings for polyolefin films  <b>175.380</b> Xylene-formaldehyde resins condensed with 4,4'-isopropylidenediphenolepichlorhydrin epoxy resins  <b>175.390</b> Zinc-silicon dioxide matrix coatings  <b>176.170</b> Components of paper and paperboard in contact with aqueous and fatty foods  <b>176.180</b> Components of paper and paperboard in contact with dry foods  <b>177.1200</b> Cellophane  <b>177.1210</b> Closures with sealing gaskets for food containers  <b>177.1330</b> Ionomeric resins  <b>177.1350</b> Ethylene-vinyl acetate copolymers (not exceeding 0.0085mg/cm<sup>2</sup>)  <b>177.1400</b> Hydroxyethyl cellulose film, water insoluble  <b>178.3860</b> Release agents</p>	<p>For plastics in food contact applications Abril 9031 is cleared for use in all polymers up to an addition rate of 5% w/w in the final compound</p>