



**Concentrol®**

Chemical Solutions

SECTOR

**FOOTWEAR**

LEADERS OF THE UNSEEN





## POLYURETHANE

### MOULD RELEASE AGENTS

Concentrol offers products that achieve the main goals of a release agent:

- High demoulding power.
- Good shiny, satin or matt finish according to customer requirements.
- Uniformity of the surface.
- Achieve the least fouling of the mould.
- Great adaptability to the pieces defined in the footwear design.
- Productivity improvement.

#### MONODENSITY SHOES AND SHOE SOLES



Mono density shoe sole



Single density slippers  
- direct injection



Dual density shoe sole



Dual density boots  
- direct injection

#### POSTERIOR ASSEMBLY

In the case of mono density soles, after applying the release agent, the polyurethane is introduced by casting into the mould. Our products help to demould the piece, leaving it ready to be subjected to subsequent treatments to improve their adhesion or appearance, for example by degreasing or painting.

The dual density process must achieve the adhesion of the sole to the midsole during the moulding process itself. Also, in this case, the sole is cast and closed with a false lid. The sole obtained after unmoulding is adhered to the rest of the shoe. It is important for the process that the release agent does not interfere at all in the adhesion of the sole and the midsole.

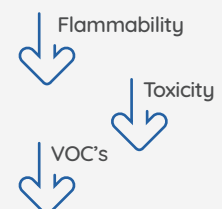
#### DIRECT INJECTION

Thanks to the high quality of our shoe release agents we can make a direct injection of both mono and dual density soles. The process consists of moulding and bonding the sole onto the footwear at the same time eliminating adhesive and sewing. The upper part of the footwear acts as the last lid after casting the polyurethane.

#### TYPE OF CONCENTROL RELEASE AGENTS



#### SUSTAINABLE SOLUTIONS



#### SOLUTIONS ADPATED TO THE DIFFERENT PROCESS PARAMETERS



## STABILIZERS FOR POLYURETHANE FOAMS

The CONCENTROL STB PU range improves the emulsification of the components of the system, offering enough stabilization in the foam expansion process and optimal cell opening, besides control of the size and distribution of the cells. Meets the requirements of foam manufacturers.

|                         |  |   |
|-------------------------|--|---|
| POLYESTER<br>SHOE SOLES | High density<br>(450-1200 kg/m <sup>3</sup> )      | Standard silicone surfactant, fine and uniform cell structure is obtained.              |
|                         | Medium-low density<br>(300-550 kg/m <sup>3</sup> ) | Good dimensional stability, certain degree of cellular openness.                        |
|                         | Medium-low density<br>(250-500 kg/m <sup>3</sup> ) | Co-surfactant, excellent skin formation, reduces peeling and defects like pinholes.     |
|                         | Cell opener<br>(250-550 kg/m <sup>3</sup> )        | Cell regulator and cell opener surfactant, based on organic polymers free of silicones. |

## MOULD CLEANERS

Our range of cleaners enable moulds to be cleaned easily after long work cycles.

Mould cleaner that contains NMP

Low toxicity mould cleaner

Highly effective mould cleaner. Contains NMP

Mould cleaner or cleaner in gel form. Do not contain NMP

Mix of organic solvents. It does not contain NEP or NMP

## AUXILIARY PRODUCTS

### • ADHESIVES

Concentrol offers **WATER BASED ADHESIVES** (the range TACKTROL®), **HOTMELT ADHESIVES** (the range NETMELT®) and polyurethane based **REACTIVE HOTMELT ADHESIVES** (NETMELT PUR®).

We should give special mention to our range of water based contact adhesives TACKTROL CCA, indicated for gluing all types of textiles and leather in pre-sewing operations - for gluing interior lining, heel supports etc. They can be applied by spraying, roller or brush.

## PHYLON (EVA)

## MOULD RELEASE AGENTS

Concentrol's demoulding department has developed products that provide the necessary lubrication to be able to extract the soles or parts of Phylon without causing superficial damage.

- **Water based concentrated product to dilute** that can be diluted up to 1:100, depending on the working conditions.
- **High demoulding efficiency** - keeping it when diluting the product.
- **Stability at temperatures over 200 °C.**
- Possibility to obtain a **shiny, satin or matt finish**.



EVA rubber sole for sports shoes



Phylon shoe



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