Ortolan release agents

APPLICATION ADVICE

**General information:** Ortolan release agents are used for separation between the formwork and the hardened concrete. The formwork is protected and the durability is extended.

The performance of the release agent depends on formwork temperature, production process and concrete temperature.

To achieve high quality exposed concrete with Ortolan a preliminary tests are recommended.

Ortolan release agents can be applied on horizontally and vertically surfaces.

**Formwork:** Before treatment with mineral oil or wax based products, the formwork should be completely dry and clean. Before treatment with water emulsions the formwork can be moist. Rust and concrete residues should be removed completely.

Before applying an emulsion-based release agent it is important to take care that the formwork’s surface is absolutely free of oil and grease. If necessary clean it using Donnitil Oil Ex.

**Application:** Ortolan release agents are ready to use. If not explicitly mentioned, mixing with water or solvents is not allowed.

Ortolan release agents must be distributed evenly, thin and applied sparingly. Puddles and accumulation of the material must be avoided. Excess material in cavities and edges of the formwork leads to reduced quality of the demoulded concrete surface. Wiping with a rubber squeegee is recommended in case of very smooth formwork.

Finally use a clean cloth to get best results.

If the concrete surface will be coated later on, the release agent must be applied sparingly minimizing the residues on the demoulded concrete surface.

After the release agent is applied on the formwork, it must be protected from contamination and weather influence. If the formwork is not used for a longer period of time, it is necessary that the release agent coat is checked. Probably it has to be cleaned or exchanged.

**Handling:** Liquid Ortolan release agents have to be applied using manual spraying devices or stationary spraying systems.

For Ortolan release agents in drum packages we recommend to use electrical pump MC-Pump 2 incl. 20 m hose and nozzle package 8004, 8002.

Also oil resistant spraying devices with spraying pressure of > 4 bar, for example MC-Spezialspritzte, Gloria High Performance sprayer 510 T or Mesto Ferrum Plus 3560 P / 3580 P, are suitable and have gut results.

In this case use 1421 T flat spray nozzle 80-01 E from Mesto.

In case of application with stationary spraying systems the process conditions have to be respected. Use nozzles with smaller diameters in this case.

Paste based waxes as Ortolan Extra 791 are not sprayable. The application is done by brush or cloth. In case of exposed concrete requirements use polishing machine.

**Further information:** Having individual conditions on the building site or precast factory, preliminary tests help to identify the type of the release agent. Please refer to DIN 18217 “Concrete surfaces and formwork surface”
and DBV (German Institute for concrete) data sheet “Architectural Concrete”.

Flat spray nozzle 8004 from MC-Pump package is for use in summer conditions.  
Flat spray nozzle 8002 from MC-Pump package is for use in winter conditions.

The information in the technical and safety data sheet is essential and has to be observed.