MOULD & HOSE RELEASE AGENTS - FOR RUBBER PRODUCTS

RELEASE AGENTS

A release agent is a chemical/media which will give the slip effect between the two substrates & facilitates them in processes involving the different manufacturing methods for the manufacturing of the products. A release agent is further classified as internal (being used/added as one of the ingredients in the rubber compounds) and external (applied on the moulds, mandrels, dispersions for batch lay-off...)

MOULD RELEASE AGENTS

An external release agent which helps to facilitate the ease of the removal of the moulding (rubber products) from the mould.

Mould release agents are basically of Stearates, Silicone Emulsion & Oil, Wax Based, Fluorocarbon Based, Soap Based, etc. and it is based on Water or Solvent and can further classified as semi-permanent type as well.

Mould release agents impart good release of the cured rubber products from the mould apart from good surface finish. This is done by forming the thin film layer on the mould surface which gives this function. The efficiency of the spread-ability of the release agent depends on the surface tension of the material being used, lower the surface tension better is the spread-ability.

The selection of the mould release agents depend on the following parameters & proper usage (Semi-permanent release agent has to be cured before going for the moulding cycle)

i. Ease of Release - its efficiency
ii. Durability - The transfer of the release agent to the rubber products should be minimum (Semi-permanent release agents exhibit very low transfer)
iii. Inertness - It should not get react with the rubber compound

The type of release agent is selected based on the severity of the wearing of the release agent/its transfer, type of rubber being used and the moulding condition.

PRODUCTS AVAILABLE

RHENODIV 30/1 WATER BASED - (SILICONE FREE - Fatty acid derivative based)

RHENODIV 60 SEMI PERMANENT (Reactive Silicone polymer based)

RHENODIV AS 100 Solvent Based emulsion of reactive/non-reactive silicone polymers
HOSE RELEASE AGENTS

PARAMETERS REQUIRED FOR HOSE RELEASE AGENTS:

- It should have good gliding and release properties.
- No influence on the physical properties and surface appearance of the rubber.
- No swelling or any change in volume of the hose.
- Easy to wash-off from the cured hose and easily dilute-able with water.
- It should provide corrosion protection and should not causeany skin irritation.

PRODUCTS AVAILABLE

RHENODIV D687-5  Mixture of polyfunctional alcohols (Silicone free) & Various grades are also available.

*Rhenodiv Series of Release Agents are manufactured by M/s. RheinChemie.