MCR Drier

TECHNICAL DATA SHEET

DOSAGE

We recommend following percentages based on resin solids:

MCR Drier (considered as 100% metal) 1.4 %, Calcium 0.2 %, Zirconium 0.3 %

For cases with delays in drying time:

For White Alkyd based on long Sunflower & medium Sunflower Alkyd:

In case of drying delays, add some Cobalt or Manganese and complementary driers to
MCR Drier 1.0 %, Cobalt 0.02 %, Calcium 0.2 % and Zirconium 0.3 % or
if necessary more: MCR Drier 0.8 %, Cobalt 0.04 %, Calcium 0.2 % and Zirconium 0.3 %

For Wood finish Polyurethane 1 K based on urethanated Alkyd and based on Medium Alkyd:

In case of drying delays we recommend to formulate a completely **Cobalt-free formula** and compensate with Manganese drier to fasten drying time. (Cobalt-urethane forms colorful complex)
MCR Drier 1.0 %, Manganese 0.02 %, Calcium 0.2 % and Zirconium 0.3 % or if necessary more: MCR Drier 0.8 %, Manganese 0.04 %, Calcium 0.2 % and Zirconium 0.3 %

This formulas with Manganese as compensator can be used for White alkyds as well!

Calculations formula:

$$\text{Kg of drier} = \frac{(\text{Kg of resin})(\%\text{ of solids of resin})(\%\text{ of dosage})}{100\ \ (\%\text{ of metal in drier})}$$

Example.: Suppose we have a tank containing **1200 Kg of alkyd resin of 50 % solids**, and we want to dosage: MCR Drier 1.4%, Calcium 0,2 % and Zirconium 0,3 %, available in our stock are following driers: MCR Drier, Calcium 10 % and Zirconium 18 %. Also Cobalt 10% and Manganese 10%.

8,4 Kg MCR Drier $= \frac{1200 \times 50 \times 1.4}{100 \times 100}$ and in the same way we obtain:

12 Kg 10% Calcium octoate $= \frac{1200 \times 50 \times 0.2}{100 \times 10}$ and in the same way we obtain:

10 Kg 18% Zirconium octoate $= \frac{1200 \times 50 \times 0{,}3}{100 \times 18}$ and in the same way we obtain:

*** In case of long drying time in Whites: MCR Drier 0.8 %, Co 0.04 %, Ca 0.2 % and Zr 0.3%**

4,8 Kg MCR Drier, 2,4 Kg Cobalt 10%, 12 Kg Calcium 10% and 10 Kg Zirconium 18%

*** In case of long drying in Urethanated: MCR Drier 0.8 %, Mn 0.04 %, Ca 0.2 % and Zr 0.3%**

4,8 Kg MCR Drier, 2,4 Kg Manganese 10%, 12 Kg Calcium 10% and 10 Kg Zirconium 18%

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