

Drier	Common Metal Concentration	Other Concentrations Available
Cobalt	12	6
Manganese	12	6, 9, 10
Lead	36	24, 30, 32, 33
Calcium	10	4, 5, 6, 8
Cerium	12	6
Zirconium	24	6, 12, 18
Zinc	18	6, 8, 16
Iron	12	4, 6, 10

STARTING POINT USE LEVELS OF DRIERS

Drier	Based on vehicle solids
Cobalt	0.01 to 0.1% metal
Manganese	0.02 to 0.1% metal
Lead	0.35 to 0.5% metal
Calcium	0.1 to 0.3% metal
Zirconium	0.1 to 0.3% metal
Cerium	0.1 to 0.15% metal
Zinc	0.1 to 0.15% metal
Iron	0.04 to 0.15% metal

*Vehicle solids (or "binder portion") refers to oil and resin portion of the coating formulation.

DRIER CALCULATIONS

Drier recommendations are based on percent metal on vehicle solids.

To calculate the quantity of various driers required to be added to a coating formulation, it is necessary to know:

1. Vehicle solids
2. Percentage of metal available in the driers
3. Required percentage of metal on vehicle solids.

The quantities of driers are calculated from the formula:

$$\text{Drier required (in kg./lb.)} = \frac{\text{Vehicle solids (in kg./lb.)} \times \% \text{ Metal Required}}{\% \text{ Metal in Drier}}$$

WATER REDUCIBLE DRIERS

In line with the growth away from solvent based coatings. DURA offers a range of driers designed for water

DRIERS FOR HIGH SOLIDS COATINGS

These are proprietary products for critical

reducible alkyds. These driers are not similar to the once used for solvent-based systems and the formulator has to work carefully, especially in the early stages of their use. Our technical service laboratory will be pleased to answer any of the paint chemist queries.

The standard water reducible driers are based on Cobalt, Calcium, Manganese and zirconium.

Dry Cat 97 is designed to improve drying with minimal effect on gloss.

Dry Cat 507 is a blended drier designed for certain high gloss/zero VOC enamels.

BLENDED DRIERS

DURA offers a wide range of blended driers. Based on our extensive experience while working with formulators, we are able to offer specific combinations based on the end use application. Moreover, we can tailor make any combination our customers may require.

drying requirements.

Dural A-MS is an aluminum drier designed specifically for high solids AND low VOC air-drying alkyd systems. Unlike conventional driers, which work on an oxidation process, this product acts as a cross-linking agent. It is stable in storage and replaces both the through and auxillary driers.

Alphacat-DH is a drier accelerator and, when used along with conventional driers, provides improved gloss and intercoat adhesion.

Dry Cat 16 and 8 provide excellent drying performance on a wide range of coating vehicles. They are replacements for conventional through driers where the coating is used in adverse conditions.