CROSS REF:
File W-582 W-521
W-865 W-360
"45 Process" "46 Process"

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Philadelphia Laboratory
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C O N F I D E N T I A L

LABORATORY MEMORANDUM REPORT #M-107

LUMP COLOR

The term "Lump Color" refers to the physical state of a pigment and applies to precipitated, uncalcined, inherently fine pigments.

Pigments as now used are usually in the powered state since they have been passed through a micropulverizer or similar mill. Generally such treatments of pigments are desirable but with iron blues and organic reds a bad dusting and a mill loading problem results.

With the conventional method of grinding, the use of unpulverized pigment resulted in considerable seed and some grit. Since the "45"and "46 Process" have proved more efficient than conventional grinding, the dried press cake was retested in the Milori Blue and Toluidine Red formulas. Examination of the mill bases and enamels showed the absence of seed and grit.

The production advantages in using lump pigments are readily apparent. The dusting problem is better than 90% eliminated, a few fines are usually present. It is possible to load a mill more rapidly since it is not necessary to wait for the usual cloud to settle between additions and the denser form can be packed thereby eliminating at least one spin.

There is also a quality advantage. Tints made from bases using lump pigments are definitely cleaner than tints made from bases containing pulverized pigments. This has been checked in both laboratory and plant grinds.

While it is desirable to use lump pigments as widely as possible, some pulverized pigment will have to be

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continued. The problem of using lump pigments in roller mill and stone mill grinds has not been solved.

Permanent codes have been issued for two lump pigments.

W-521	LUMP MILORI BLUE
W-360	LUMP TOLUIDINE RED

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