



RADIO CORPORATION OF AMERICA

RCA VICTOR DIVISION  
TUBE DEPT. STANDARDIZING

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SUBJECT SETTLING CALCIUM MAGNESIUM SILICATE  
Process Specification  
(Development Shop)

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STANDARDIZING  
NOTICE 34-17-15U

SUPERSEDED DATE 8/24/49

Initially for Type C73158

1. MATERIALS

- C640 Calcium Magnesium Silicate; Cerium Phosphor
- P29C Potassium Silicate, 10% Solution.
- \*P69B Potassium Sulfate, 1N Solution.
- \*W7K Distilled Water.

Note: The phosphor shall be in a finely divided form; any grinding necessary should be done in acetone by the Phosphor Laboratory.

2. PROCEDURE

- a. Add 1 g. of dry phosphor to 100 cc. of distilled water and mill only sufficiently long to disperse the phosphor well (bottle size approximately 1/3 liter, speed 150 rpm., time 20 minutes maximum).
- b. To 37.8 cc. of milled suspension (at 10 mg/cc. for screen weight of 3 mg/cm<sup>2</sup>) add 40 cc. of potassium silicate solution, 50 cc. of potassium sulfate solution, and 300 cc. of distilled water. Shake well in flask and pour into bulb to be settled.
- c. Allow to settle for 3 - 5 hours.
- d. Pour and dry.

Important: Water has a deleterious effect upon this phosphor, which is aggravated by milling. Milling and settling times should therefore be kept to a minimum. Only freshly made suspensions should be used.

ENGINEERING SECTION  
STANDARDIZING