



RADIO CORPORATION OF AMERICA

RCA VICTOR DIVISION,
TUBE DEPT. STANDARDIZING
HARRISON, N. J. LANCASTER, PA.

EEE

DATE Oct. 13, '49 PAGE 1

STANDARDIZING
NOTICE

34-37-2F

SUBJECT TEST FOR CHLORIDE CONTAMINATION
ON PARTS

SUPERSEDED DATE 6/30/45

Initially standardized for Fact. #2.

1. EQUIPMENT

- a. Fisher Scientific Co., Catalog #7-155 Colorimeter.
- b. 100cc graduated cylinder.
- c. 400cc beakers.

MAY

1955

2. SOLUTIONS

- a. Na Cl Solution - 1.648 g/L (1.00 gm Cl/L distilled water).
- b. Standard Chloride solution - 5cc of above solution in 995cc distilled water.
- c. 2% Silver Nitrate solution (distilled water).
- d. Concentrated Nitric Acid.

**

DANGER

NITRIC ACID SAFETY PRECAUTIONS: See 33-2-7C

3. PREPARATION

Clean all glassware thoroly with ammonium hydroxide and rinse with distilled water. Dry with acetone.

4. PROCEDURE

- a. Fill cylinder on right hand side of apparatus, with standard solution until solution reaches bottom of attached graduate.
- b. Add 5 drops of Silver Nitrate solution and 2 drops of concentrated Nitric acid.
- c. Wash parts in about 150-200cc of boiling distilled water. Fill separate graduated cylinder with exactly a 100cc of sample. Dilute total sample with distilled water if insufficient (less than 100cc).
If volume of total samples is over 100cc measure volume remaining after 100cc sample (for test) has been removed.
- d. Add Silver Nitrate and Nitric Acid as in step 'b'.
- e. Place plunger in cylinder containing Standard solution.
- f. Look thru eyepiece of Colorimeter and adjust plunger until the both halves of the eyepiece are of equal intensity.
- g. Read position of the standard solution in the attached graduated cylinder from the bottom of the meniscus.

5. CALCULATION

$$\text{Reading in cc} \times \frac{\text{Total volume of sample (cc)}}{\text{Volume of Sample used for test (cc)}} \times 5 = \text{Micrograms Cl., present in sample.}$$

To obtain micrograms per part, or micrograms per cc divide the above result by the number of parts sampled, or by the number of cc in the total sample respectively.

ENGINEERING SECTION
STANDARDIZING

35/EG