

RADIO CORPORATION OF AMERICA RCA VICTOR DIVISION. Tube dept. Standardizing HATRISON, N. J. LANCASTER, PA.

Process Specifications

EEE

STANDARDIZING NOTICE

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34-14-5G

10/26/42 SUPERSEDED DATE <u>พิเมินที่เพาะเลยเนินที่เหมียนที่เหมียนที่เหมียนที่เหมียนที่เหมือนการสามารถสามารถสามารถสามารถสามารถสามารถสามารถ</u>

SCHEDULE No. 1 (Used in Fact. #1)

1. EQUIPMENT

Electric furnace 5 two-liter beakers Hot plate Hot air oven Wire mesh baskets 5-1/2" x 4" diam. made of acid resistant materials.

2. MATERIALS

Al6 Acid Hydrochloric (Tech.) M15 Methanol Hot and cold tap water Paper towels

SUBJECT COATED CATHODE SALVAGING

DANGER :

HYDROCHLORIC ACID SAFETY PRECAUTIONS: See 33-2-70

3. FORMULA AND MAINTENANCE

- a. Two beakers containing approx. 1500 cc of 10% hydrochloric acid solution. Renew solutions after every 11 baskets.
- b. Two liters of methanol. Renew methanol after 11 baskets. Save used methanol for reclaiming.

L. PROCEDURE

- a, Air bake cathodes for 20 min, at 350°C.
- b. Load mesh basket half full of cathodes and wash with agitation in acid solution until coating has been removed.
- c. Wash with agitation in second acid solution for 1 min. and then immerse while repeating steps (a) and (b) with No. 2 basket load of cathodes.
- d. Remove No. 1 basket and wash No. 2 basket for 1 min, with agitation in second acid solution. Leave No. 2 basket in acid during subsequent rinsing of No. 1 basket by step (e) and preparing cathodes to boil.
- e. Rinse cathodes in No. 1 basket for several minutes in beaker containing hot running tap water.
- f. Pour cathodes into clean empty beaker, cover with hot tap water and bring to a boil on hot plate. While heating repeat steps 'e' and 'f' for No. 2 basket.
- g. Decant boiling water from No. 1 batch of cathodes and rinse in cold tap
- .h. Cover cathodes for 5 min. with methanol. Repeat steps 'g' and 'h' for No.2 batch of cathodes.



RADIO CORPORATION OF AMERICA RCA VICTOR DIVISION, TUBE DEPT. STANDARDIZING EEE

HARRISON, N. J.

LANCASTER, PA.

STANDARDIZING NOTICE

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COATED CATHODE SALVAGING Process Specifications

4. PROCEDURE (Cont'd)

> i. Decant methanol into another clean beaker, pour cathodes evenly over a paper towel and place in oven (90°C) to dry. Repeat step i for No. 2 bath.

> > SCHEDULE No. 2 (Used in Fact. #2 for all Cathodes)

2. EQUIPMENT

Electric furnace 2 two-liter beakers Hot air oven heated to 80°C

2. MATERIAL

A66 Acid Acetic

A55 Acetone C.P.

M15 Methanol C.P. Hot tap water

DANGER

ACETIC ACID SAFETY PRECAUTIONS:

3. FORMULA AND MAINTENANCE

Acetic acid solution - 20% by volume. Since production is limited, just cover cathodes during washing and then discard after using once.

Methanol - Use just enough fresh methanol to cover cathodes. Save used methanol for reclaiming.

4. PROCEDURE

- a. Air bake cathodes for 1/2 hr. at 400°C.
- b. Wash in acetic acid solution at room temperature for 2 min. or until coating has been removed.
- c. Wash thoroly in running hot tap water for 5 min.
- d. Wash in acetone for 5 min., swirling contents of beaker occasionally.
- e. Same as step 'c'.
- f. Rinse in fresh methanol for 1 min. and dry in oven. (Cathodes are now ready for firing as indicated on FK or FKW assly).



RADIO CORPORATION OF AMERICA RCA VICTOR DIVISION, TUBE DEPT. STANDARDIZING

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SALVAGING OF COATED CATHODES

4. PROCEDURE (Cont'd)

HARRISON, N. J.

NOTE: Should a stain remain on cathodes after the above salvaging process, proceed as follows:

- 1. Wash in 50% acetic acid solution (by volume) for 5 min.
- 2. Wash thoroly in running hot tap water for 5 min.
- 3. Wash in distilled water for 3 min.
- 4. Rinse in methanol and dry in oven.