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Dear Loren,

Here are some formulas which I have used for Rainbow transmission holograms.

1. Warm the developer, and place the exposed hologram into a bath of warm distilled water for about a minute or so before development.
2. Mix developer and bleach with distilled water only.
3. DEVELOPER, FOR FIVE LITRES.

100 GRAMS SODIUM SULPHATE
 300 GRAMS SODIUM CARBONATE
 40-60 GRAMS QUINOL (HYDROQUINONE)
 1-10 GRAMS PHENIDONE

4. BLEACH (REHALOGENATING) FOR FIVE LITRES

150 GRAMS FERRIC SULPHATE
 150 GRAMS EDTA di-SODIUM SALTS
 150 GRAMS POTASSIUM BROMIDE
 150 GRAMS → SODIUM HYDROGEN SULPHATE, OR CONCENTRATED SULPHURIC
 60ML OR GLACIAL ACETIC ACID.

1. DEVELOPE FAIRLY DENSE.

2. WASH (SHORT WASH)

3. BLEACH TILL CLEAR

4. WASH (GOOD WASH FOR 5, 10 OR MORE MINUTES)

WATER SHOULD BE
 NOT TOO HOT OR COLD.

5. TO PREVENT "PRINT OUT" OR DARKENING OF THE HOLOGRAM FROM UV LIGHT, GIVE THE FILM A SECOND BLEACH IN A WEAK SOLUTION OF STANDARD DICHROMATE BLEACH. THE DICHROMATE BLEACH SHOULD NOT COME INTO CONTACT WITH THE REHALOGENATING BLEACH, AS THIS WILL DESTROY ITS ACTION.

6. WASH HOLOGRAM WELL.

7. AFTER WASH PUT HOLOGRAM INTO BATH OF DISTILLED WATER WHICH SHOULD HAVE "FOTO-FLOW" (OR SOME OTHER BRAND OF WETTING AGENT) AND SOME ACID (ABOUT 5-10ML PER LITRE) ADDED.

8. PIN HOLOGRAM UP TO DRY. SPOTS OF SPRAY MOUNT GLUE CAN BE REMOVED AFTERWARDS WITH A SOFT CLOTH + "WHITE SPIRIT".

P.S. YOU MAY WISH TO ADD WETTING AGENT TO ALL THE DEVELOPERS/BLEACHES. FIVE LITRES OF DEVELOPER OR BLEACH IN A TRAY CAN CAUSE SCRATCHES ON THE FILM DUE TO THE WEIGHT OF LIQUID. PUT CLEAN (AND SMOOTH EDGED) SHEETS OF GLASS IN THE PROCESSING TRAYS, OR REDUCE THE AMOUNT OF DEV/BLEACH TO HELP AVOID THIS.

PPS

I WILL FIND THE NUMBER FOR THE GERMAN PLATES AND SEND IT TO YOU ALONG WITH A REVISED DEVELOPER TO BE USED WITH THEM. SO FAR THEY ARE PLATE ONLY, 5X4" 30X40CM, 50 X 60CM, AND RED, GREEN BLUE, OR PANCHROMATIC.

GOOD LUCK,

BEST WISHES

SIM MCINTYRE