

BUFFERED STOP BATH

This buffered stop bath is mainly intended to be used while processing film in STAINING developers. It is also recommended when working environmentally friendly. Do not forget that acids are rather hard to be rinsed out from gelatine emulsions, twice (!) as much water is needed. This stop bath can easily be replenished and thus lasts much longer than a 1,7% acetic acid bath, which compensates largely the somewhat expensive components.

This bath has been formulated by Ryuji Suzuki.

| COMPONENT | | QUANTITY to make 1 lit work solution. |
|---------------------------|--|---------------------------------------|
| COLD TAP WATER | | 600 cc |
| ACETIC ACID, 90% | | 60 cc |
| SODIUM HYDROXIDE (PEARLS) | | 25 gr |
| TAP WATER | | Fill to make 1000 cc |

MIXING INSTRUCTIONS: TO BE FOLLOWED RIGOROUSLY!

DISCLAIMER: MIXING ALKALI WITH ACIDS WILL RESULT IN AN EXOTHERMIC REACTION!
BE AWARE OF THE HEAT AND THE EVENTUAL SPLASHING!

Protect your eyes, the whole of your face, arms and hands, do not breath the vapours!
WEAR PROTECTIVE CLOTHING!

PROCEED THOUGHTFUL AND CAREFULLY!

First, place a heat resistant mixing recipient, which is about twice the final volume, in a cold water cooling bath (bain-marie) to cool down the exothermic reaction, this is important for your security!

Start with 2/3 of the total volume of cold water, add the acetic acid, then slowly add bit by bit the sodium Hydroxide while carefully observing the temperature.

Be aware of splashing!

This mixture will heat rather surprisingly (it might boil), so stop adding Sodium Hydroxide when you think the temperature rises to fast to high! Wait till this mixture cools down, then slowly go on adding gently the Sodium till completion.

Then add cold water till the desired total volume is reached.

KEEP THE RECIPIENT IN THE COLD WATER BATH AND WAIT TILL IT HAS COOLED DOWN.
IF NEEDED, ADD COLD WATHER OR ICE CUBES TO THE COOLING BATH, NOT TO THE MIXTURE!

When no Acetic Acid is available: one can use household vinegar which is usually 8% strong. In this case use 675 cc of this component right out of the bottle and DO NOT add water. When the mixture is completed till 1000 cc, the right amount will be reached.

When only 80% acetic acid is available then use 67,50 cc and add sufficient water.

For 60% then 90 cc, and for 14% then 385,77cc will be needed.

Use for 30 sec with continuous agitation at the same temperature as the developer.

Then rinse for 2 min, as Sodium Hydroxide is not so welcome in the fixing bath.

Then fix as usual.

This bath can be replenished at the rate of 30 cc glacial acid, or 100 cc of a 2% mixture, per each 500 cm² processed, per 1000 cc work solution.
Discard when the pH value rises above 6,5.