The effects predicted by this table will be enhanced if extra potassium bromide is added to the developer.

Selenium toner is a valuable tool for altering image tone, and it also increases the density of the maximum black. Since it is impossible to describe the effects of selenium toner on all warm tone papers (dilution of developer also affects how selenium will tone), experimentation is highly recommended for those who wish to obtain the best results with the particular paper they are using. Another time-honored technique for securing excellent brown tones by direct development is as follows: keep on hand a little old, exhausted print developer (it will have a brownish tinge), and simply add this to fresh developer, in the proportions of about half of one to half of the other. Although this method is somewhat unpredictable, it offers really useful results.

For a colder tone a small amount of organic restrainer, such as Formulary's TAF-1 can be added to the developer. This actually defeats the purpose of TD-32, which is intended as a warm tone developer. If neutral or cold tones are desired, a neutral paper should be used with a neutral developer such as Formulary TD-31.

LOW-ODOR ARCHIVAL FIXING

Printmakers interested in a low-odor rapid archival fixer are encouraged to try Formulary's The Photographer's Formulary-4. This fixer works in 30 seconds on RC paper (1 minute on fiber-base) , and produces an archival print after only 20 minutes of washing. Use of this fixer does not require either a hypo clearing agent or an acid stop bath. Although it can be used with an optional hardener which does not interfere with archival washing, non-hardened prints are easier to spot and tone.

FOR ANSWERS TO QUESTIONS ON THE USE OF TD-32 PAPER DEVELOPER, PLEASE CALL US AT 406-754-2891.

Please consult your local water and sewer authorities regarding disposal of darkroom chemicals.

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TD-32 SUBSTITUTE FOR SELECTOL®

Cat No. 02-0116 TO MAKE 2 TO 4 LITERS OF WORKING SOLUTION
Cat No. 02-0117 TO MAKE 4 TO 8 LITERS OF WORKING SOLUTION

TD-32 is a warm-tone, moderate contrast print developer similar in properties to Selectol. It is especially intended for use with warm-tone papers such as Ektalure, go toward a greenish tinge, but the differences are very small. Normal dilution Portriga and Center. It produces subtly deeper, cleaner prints than Selectol. Tones are slightly richer, with less tendency to is 1 part stock to 1 part water, with a developing time of two minutes. For greater contrast, the developer can be diluted 1:3 or 1:4. TD-32 IS TWICE AS STRONG AS SELECTOL: THEREFORE, USE ONLY HALF AS MUCH STOCK AS YOU NORMALLY WOULD.

FOR YOUR CHEMICAL SAFETY

All chemicals are dangerous and must be treated with respect. Please read the chemical warnings on each package. Always use rubber gloves and dust mask when using chemicals.

Some individuals become sensitized (develop allergic symptoms or rashes) when using certain chemicals. If this should occur, discontinue use and consult a physician.

The user assumes all risks upon accepting these chemicals. IF FOR ANY REASON YOU DO NOT WISH TO ASSUME ALL RISKS, PLEASE RETURN THE CHEMICALS FOR A FULL REFUND.

Consult with your local sewer and water authorities regarding disposal of darkroom chemicals.

KEEP AWAY FROM CHILDREN

FIRST AID: If contact is made, flush with water. If extensive contact is made or if in eyes, consult a physician. If inhaled or swallowed, get medical attention at once.

STOP BATH

It is important to use fresh stop bath. This should be either the standard 2% acetic acid, or if an odorless stop bath is desired, Formulary TS-4 is recommended.

STORAGE

After mixing the stock solution will last up to three months if kept in a tightly capped bottle filled to the top. However, for best results, all developers should be used as soon as possible after mixing. After dilution to a working solution, the developer should be discarded at the end of the day's work.

CAPACITY

Capacity of the developer can be stretched to about 20 8x10s per liter of 1:3 working solution. This may however, be a false economy for photographers interested in the finest print quality.

FOR BEST RESULTS USE DISTILLED WATER

HOW TO MIX TD-32

Mixing is very simple. Place 500ml or 1000ml of water, depending on kit size, at about 120° F in a container. Slowly add the contents of Packet A to the water while stirring gently. Continue stirring for one minute. If the chemicals don't go into solution add a pinch of Packet B. Once completely dissolved, slowly add the contents of Packet B. Continue to stir for one minute. If the developer has not completely dissolved, leave it for fifteen minutes and stir again. Place 500ml or 1000ml of water, depending on kit size, at about 120° F in another container. Slowly add the contents of Packet C to the water while stirring gently. Continue to stir until all of the powder has gone into solution. Now pour the two solutions together in a bottle, filling it to the top and seal tightly.

ALTERING IMAGE TONE AND CONTRAST WITH TD-32

For warmer tone, simply add a gram or more of potassium bromide to TD-32 working solution.

This addition will also have an effect of increasing contrast, leading to a slightly snappier print. However, speed of the paper is decreased somewhat. I will therefore be necessary to expose the print for a slightly longer time when bromide is added. Development time can also be increased up to 3 or 4 minutes since there is no danger of fog. This may lead to a better maximum black, and greater shadow and highlight contrast than without the use of bromide.

However, adding too much bromide will make it hard to get a good maximum black, and it may have an unpleasant greenish tinge. Another hint to printmakers concerned about obtaining the finest image tone: never underdevelop the print. Developing times of less than two minutes are bound to lead to poor tone.

Another way of altering image tone (and contrast) is by dilution.

John and Field in their *Photographic Chemistry* remark that "in the development of bromide papers, the smaller grains tend to be reduced first; if development is curtailed, before the large particles are fully developed, the image will have a warm tone, but the color will normally be an unpleasant 'muddy' olive or brown-black. For this reason, overexposure and underdevelopment of bromide papers is to be avoided. With chlorobromide papers (warm-tone papers) the image on development is usually of finer particle size than that of bromide, and if development is performed correctly, various colors may be obtained: The following table is given as a general guide:

RELATIVE EXPOSURE	DEVELOPER DILUTION	TIME	IMAGE COLOR
1	1	1.5	Warm Black
2	5	5	Sepia
3	10	10	Warm Sepia
4	15	15	Red-brown
5	20	20	Brick-red

This table is only given as a starting point for experimentation. Each developer paper combination can behave in a completely different way. Note that when image color is changed by dilution as suggested above, the paper will react very differently to selenium and other toners, so that an almost limitless variation in tones is possible.