FOMATEST THIO

THE KIT FOR CHECKING STABILITY OF PROCESSED X-RAY FILMS

Rating of the product

FOMATEST THIO is a kit for a simple check of stability of processed X-ray films INDUX in terms of their ability to be archived. By means of the test kit inadequate fixing and washing processing of the film, whick makes the stability of the exposed image and the service life of the film shorter may be determined immediately.

The FOMATEST THIO kit is supplied in a box containing a small bottle with 30 ml of FOMATEST THIO, a dropper, an etalon strip, application instructions, and a package of paper filters.

Testing

Selection of the test area

The test is done on a completely processed and dry radiogram, where an absolutely clear and unexposed spot of about 1 square cm is selected (which is not part of the image, because the chemicals leave yellowish coloration). If there is no such spot on the film, the test may be performed on an unexposed film that was processed under identical conditions as the tested radiogram.

The basic test

The dropper is held about 1 to 2 cm above the tested zone of the film and one drop of FOMATEST THIO is released without the dropper touching the surface. The chemical reacts within 2 minutes plus minus 15 sec. Using a small piece of the filter paper the drop is absorbed carefully, again without touching the tested area of the film at all. The remaining fluid is removed by pressing finger lightly on the filter paper. The emulsion must not be damaged by the filter paper. The tested zone is dried by airflow. The described procedure is repeated on the reverse side of the film on the same place.

Test evaluation

The film must be protected against the effects of direct sunlight or other intense light sources. The film must be evaluated as soon as possible, not later than 30 minutes after the test. Delay in evaluation may result in incorrect evaluation, because the yellow spot on the tested area darkens gradually. The tested area is placed over a standard white background and compared visually with the enclosed etalon strip positioned next to the test spot. The etalon colour that is closest to the colour of the spot identifies the expected life of the radiograph.

Colour grades of the etalon correspond to values in the following table:

Color grade	Content of thio-sulphate $(S_2O_3)^{2-}$ total on both sides of the film (g/m^2)	Archivability in years Life expectancy (LE)[1/]
1. darkest	more than 0.35	not capable of being archived, find and correct error, requires additional processing [2/]
2. dark	max. 0.20	up to 10 years, average archivability LE = 10
3. light	max. 0.10	up to 100 years, long-term archivability, LE = 100
4. lightest	max. 0.04	permanent, archivability film LE = 500

1/ LE according to ISO 10602, for permanent archives LE is 500 years

2/ If the color of the test spot is more saturated than the darkest grade of the etalon, the quality of the fixer (pH and silver content) and the rinse water (amount of through-flow) must be checked and corrected for the application. Thereafter, the film must be fixed again in the fresh solution and rinsed again in running water. Older processed films may be fixed and rinsed again. For automatic processing the films may be placed in the fixing cell and drawn through the fixer and rinse, and dried. In manual processing the films are fixed for 2 minutes in a fresh fixer and rinsed for 10 to 15 minutes in running water. Finally, the FOMATEST THIO test is repeated.

Storage

The solution must be stored in a dry and cool, preferably dark place. The bottle must be closed tight after use. The color chips should be protected against contact with chemical solutions (alcohol, acetone, ethers, etc.).

Safety precautions

Avoid contact of FOMATEST THIO solution with the skin, clothing, and photographic materials. Should the skin or eyes come into contact with FOMATEST THIO, the affected spot should be rinsed with clear water immediately. The solution stains and the spots are difficult to remove.

The product is manufactured and marketed in compliance with the International quality standard ISO 9001.

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