DIN ISO 18901:2012-07 (E)

Imaging materials - Processed silver-gelatin-type black-and-white films - Specifications for stability (ISO 18901:2010)

Contents

Page

National foreword 3

National Annex NA (informative) Bibliography 3

Introduction 4

1 Scope 5

2 Normative references 5

3 Terms and definitions 6

4 Film base requirements 7

5 Processed film requirements 7
5.1 Storage conditions 7
5.2 Safety film 7
5.3 Amount of free acid 7
5.4 Tensile properties and loss in tensile properties 7

6 Requirements for the emulsion and backing layers of processed film 8
6.1 Layer adhesion 8
6.2 Emulsion flow 8
6.3 Blocking 8
6.4 Thiosulfate concentration 8
6.5 Residual silver compounds 9

7 Image-stability requirements 9
7.1 General 9
7.2 Radiographic films 9
7.3 Microfilms 10
7.4 Other films 10

8 Test methods 10
8.1 Identification of film base 10
8.2 Accelerated-ageing conditions 10
8.3 Determination of the amount of free acid 11
8.4 Tensile property test for processed film 12
8.5 Tape-stripping adhesion test 12
8.6 Humidity-cycling adhesion test 13
8.7 Emulsion-flow test 14
8.8 Blocking test 14
8.9 Residual silver compound test 15
8.10 Image-stability test 15

Annex A (informative) Washing and the effect of residual thiosulfate on the developed silver image 17

Annex B (informative) Effect of residual silver compounds on the developed silver image 18

Annex C (informative) Accelerated image-stability test for radiographic films 19

Annex D (informative) Accelerated image-stability test for microfilms 21

Annex E (informative) Accelerated image-stability test for aerial films 23

Bibliography 25