DIN SPEC 6124:2019-08 (E)

Assessment of the print quality of primary packaging made of plastic films and film composites

Contents

Page

Foreword ... 3

Introduction ... 4

1 Scope ... 5

2 Normative references ... 5

3 Terms and definitions ... 5

4 Basic requirements: ... 6

5 Test specifications ... 7
5.1 Test specification 1 — Visual examination under standard light conditions ... 7
5.2 Test specification 2 — Metrological examination of hue with a spectrophotometer ... 8
5.3 Test specification 3 — Metrological examination of ink density and opacity using a densitometer and spectrophotometer ... 9
5.4 Test specification 4 — Metrological examination with linear measure ... 9
5.5 Test specification 5 — Metrological examination with measuring magnifier ... 11
5.6 Test specification 6 — Ink adhesion ... 11
5.7 Test specification 7 — Scratch resistance ... 13

6 Types of defect ... 14
6.1 General ... 14
6.2 Seepage/smearing ... 14
6.3 Ink splashes/ink stains ... 16
6.4 Specking ... 18
6.5 Doctor blade stripes/streaks ... 19
6.6 Fill-in/Halftone structure ... 20
6.7 Unclean and/or missing ink transfer (e.g. missing dots, pinholes) ... 21
6.8 Vignette/cutoff edge ... 22
6.9 Chatter marks/vibration and oscillation stripes ... 23
6.10 Shadowing/doubling/ghosting ... 25
6.11 Squeezed edges ... 26
6.12 Tinting ... 27
6.13 Colour deviation ... 29
6.14 Insufficient opacity/ink coverage ... 30
6.15 Moiré ... 32
6.16 Poor pictorial registration ... 33
6.17 Scratches/stripes on film ... 34
6.18 Wrinkles in print substrate ... 34
6.19 Pattern repeat inaccuracy ... 36
6.20 Ink/lacquer adhesion ... 37
6.21 Scratch resistance ... 37
6.22 Transfer ... 38

Bibliography ... 40