

DIN SPEC 91496:2024-02 (E)

Recycling of printed polymer packaging - Evaluation of deinking using a test procedure; Text in English

Inhalt	Seite
Foreword	4
Introduction.....	6
1 Scope.....	8
2 Normative references	8
3 Terms and definitions.....	8
4 Reagents and materials	8
5 Apparatus.....	9
6 Sample Preparation.....	10
6.1 Preparation needed to assess inks	10
6.2 Size Reduction	10
7 Procedures	10
7.1 General.....	10
7.2 Preparation of lye.....	10
7.2.1 General.....	10
7.2.2 Mild Conditions	11
7.2.3 Medium Conditions.....	11
7.2.4 Harsh Conditions	11
7.3 Washing of sample material	11
8 Characterization of deinking performance.....	12
8.1 Colour after full deinking time.....	12
8.2 Duration for ink detachment (optional)	12
8.3 Recolouring of non-printed film (optional).....	13
8.4 Remaining colour of the washing lye after flocculation and filtration (optional).....	13
8.4.1 General.....	13
8.4.2 Flocculation of used washing lye.....	13
8.4.3 Lye quality after flocculation	13
9 Classification as deinkable	14
10 Marking and labelling	14
11 Test report.....	14
Annex A (informative) Template for deinking trials.....	16
Bibliography	17

Figures

Figure 1 — Example of successful deinking	6
Figure 2 — Deinking set-up, right before the flakes are added	12
Figure 3 — Examples of washing lye.....	14

Figure 4 — Non complete deinking..... 14

Tables

Table 1 — Dosing of NaOH 10

Table 2 — Dosing of CTAC 10