

ISO 21993:2020-01 (E)

Paper and pulp - Deinkability test for printed paper products

Contents		Page
Foreword		v
Introduction		vi
1 Scope		1
2 Normative references		1
3 Terms and definitions		1
4 Principle		2
5 Equipment		2
5.1	General equipment	2
5.2	Equipment for preparation and flotation	3
5.3	Equipment for specimen preparation	3
5.4	Equipment for analysis	3
6 Chemicals		4
7 Procedure		4
7.1	General	4
7.2	Sampling and sample preparation	6
7.2.1	General	6
7.2.2	Identification	6
7.2.3	Non-paper material/loose and glued inserts/insertions	6
7.2.4	Adhesive applications	6
7.2.5	Accelerated ageing	6
7.2.6	Breaking up of samples	6
7.2.7	Measurement of moisture	6
7.2.8	Measurement of ash content	7
7.2.9	Determination of the required amount of sample	7
7.3	Preparation of dilution water and chemicals	7
7.3.1	General	7
7.3.2	Preparation of dilution water	7
7.3.3	Preparation of chemicals	8
7.4	Pulp preparation	8
7.4.1	Pulping	8
7.4.2	pH requirement	9
7.4.3	Storage	10
7.4.4	Dilution	11
7.5	Flotation	11
7.6	Yield	11
8 Specimen preparation		12
8.1	General	12
8.2	Filter pads	12
8.3	Membrane filters	13
8.4	Handsheets	14
9 Analysis		14
9.1	General	14
9.2	Reflectance measurements	14
9.2.1	General	14
9.2.2	Reflectance factors	14
9.3	Filtrate darkening	14

9.4	Dirt particle measurement	15
9.4.1	Scanner	15
9.4.2	Procedure for dirt particle measurement	15
10	Test report	15
	Annex A (normative) Pulping devices	17
	Annex B (informative) Examples of flotation cells	18
	Annex C (normative) Testing the filtration time of filter papers	19
	Annex D (informative) Testing the pH of smaller sample amount	20
	Annex E (normative) Threshold value determination and size classification	21
	Annex F (informative) Example for a test report	22
	Bibliography	23