

DIN EN ISO 11136:2017-10 (E)

Sensory analysis - Methodology - General guidance for conducting hedonic tests with consumers in a controlled area (ISO 11136:2014)

Contents	Page
European foreword	4
Foreword	5
1 Scope	6
2 Normative references	6
3 Terms and definitions	6
4 Preliminary considerations	8
4.1 Study proposal	8
4.2 Specification of the target population	9
4.3 Further specifications	9
5 The consumer sample	10
5.1 General	10
5.2 Recruiting the consumers	10
5.3 Assembling a consumer sample	12
5.4 Sample segmentation	12
6 Size of the consumer sample	13
6.1 Decisions of measurement	13
6.2 Determining the sample size	13
6.3 Working with subgroups	14
6.4 Number of product samples and experimental design	14
6.5 Safety margin in recruitment	14
7 Test area	15
8 Products	15
8.1 Anonymous presentation of the products	15
8.2 Preparation and presentation of the products	15
9 Procedures	16
9.1 Two groups of hedonic tests	16
9.2 Rating tests	17
9.3 Paired comparison tests	17
9.4 Ranking test	18
9.5 Additional questions	19
9.6 Instructions for the consumers	19
10 Organization of test sessions	20
10.1 General	20
10.2 Plans	20
10.3 Number of products evaluated in a single session	21
10.4 Nature of the products evaluated within a session	22
10.5 Time of the session	22
10.6 Repetition of a product within a test	22
10.7 Pre-test	22

11	Analysis of the results	23
11.1	General	23
11.2	Inferential analysis	23
11.3	Ratings (see 9.2)	23
11.4	Paired comparisons (9.3)	23
11.5	Ranking (9.4)	23
12	Study report	24
12.1	General	24
12.2	Products	24
12.3	Test procedure	25
12.4	Consumers	25
12.5	Results	26
12.6	Annexes to the report	26
Annex A (informative) Example of a recruitment questionnaire		27
Annex B (informative) Methods for evaluating the data of segmentation subgroups		31
Annex C (informative) Plans for assigning products to consumers		33
Annex D (informative) Influence of the sample size on the accuracy of one mean		34
Annex E (informative) Minimum sample size for tests using rating		35
Annex F (informative) Minimum sample size for tests using ranking		39
Annex G (informative) Examples of data analysis for ratings		41
Annex H (informative) Examples of data analysis for rankings		46
Bibliography		48