

DIN EN 14035-33:2006-01 (E)

Fireworks - Part 33: Spinners - Specification and test methods

Contents		Page
Foreword		4
1	Scope	6
2	Normative references	7
3	Terms and definitions	7
4	Construction	7
4.1	Means of ignition	7
4.2	Length of initial fuse	7
4.3	Attachment of initial fuse	7
4.4	Protection of spinner	7
4.5	Materials of firework case	7
4.6	Integrity of firework case	8
4.7	Net explosive content	8
4.8	Visibility of point of ignition	8
5	Performance	8
5.1	Initial fuse	8
5.2	Principal effects	8
5.3	Functioning	8
5.4	Explosion	8
5.5	Burning matter	8
5.6	Angle of flight	9
6	Primary pack	9
7	Minimum labelling requirements	9
7.1	General	9
7.2	Type name and category	9
7.3	Safety information	9
7.3.1	General	9
7.3.2	Spinners	9
7.3.3	Identification of top side	10
7.4	Name, address and telephone number of manufacturer or distributor or importer	10
7.5	Reference to this standard	10
7.6	Printing	10
7.6.1	Labelling	10
7.6.2	Type size	11
7.7	Marking of very small spinners	11
7.7.1	Reduced size	11
7.7.2	Reduced information	11
7.8	Additional information on the primary pack	11
8	Test methods	11
8.1	Attachment of initial fuse (type test and batch test)	11
8.1.1	Apparatus	11
8.1.2	Procedure	11
8.2	Performance (type test and batch test)	12
8.2.1	Test environment	12
8.2.2	Apparatus	12

8.2.3	Procedure	12
8.3	Determination of net explosive content (type test)	13
8.3.1	Apparatus	13
8.3.2	Procedure	13
8.4	Labelling (type test and batch test)	13
Annex A (normative) Type testing		14
A.1	General	14
A.2	Number of spinners to be tested	14
A.3	Loose pyrotechnic composition	14
A.4	Thermal conditioning	15
A.5	Mechanical conditioning	15
A.5.1	Apparatus	15
A.5.2	Procedure	18
A.6	Number of primary packs to be examined	18
A.7	Test report	18
Annex B (normative) Batch testing		21
B.1	General	21
B.2	Sampling plans	21
B.3	Unit of product	21
B.4	Nonconformity	21
B.5	Test report	23
B.6	Acceptance or rejection of a batch	23
B.6.1	General	23
B.6.2	Nonconforming units	23
B.6.3	Critical nonconforming units	23
B.6.4	Major nonconforming units	23
B.6.5	Minor nonconforming units	23
Annex C (informative) A-Deviations		24