

EN 15947-5:2010 (E)**4.4 Dimensions for mini rockets (type test and batch test)**

When tested in accordance with 6.1.5 and 6.1.3 of EN 15947-4:2010, mini rockets shall have the following dimensions:

- outer diameter of tube: maximum 10 mm;
- length of tube: maximum 60 mm;
- total length: minimum 250 mm, maximum 350 mm.

5 Pyrotechnic composition (type test)

When tested in accordance with 6.2.2 of EN 15947-4:2010, the net explosive contents shall comply with Table 1. For report and/or bursting charges with a composition other than black powder, nitrate/metal-based compositions or perchlorate/metal-based compositions the same upper limits as for perchlorate/metal-based compositions apply.

Table 1 — Pyrotechnic composition

Firework types	Cat.	Net explosive content
aerial wheels	3	Not more than 160 g, shall not contain more than eight pyrotechnic units. A pyrotechnic unit shall have a net explosive content of not more than 20 g. A report charge, if any, shall have a net explosive content of not more than 10,0 g of black powder or 4,0 g of nitrate/metal-based report composition or 2,0 g of perchlorate/metal-based report composition.
bangers	2	Not more than 6,0 g black powder.
	3	Not more than 10,0 g black powder.
batteries and combinations	2	A battery or combination, except a combination containing fountains, shall have a net explosive content of not more than 500 g; the net explosive content of a combination containing fountains shall have a net explosive content of not more than 600 g, of which not more than 500 g shall be contained in elements other than fountains; the net explosive content of a battery containing fountains shall have a net explosive content of not more than 600 g. Bangers used in batteries or combinations shall have a total net explosive content of not more than 100 g. Flash bangers used in batteries or combinations shall have a total net explosive content of not more than 25 g.
	3	A battery or combination, except a combination containing fountains, shall have a net explosive content of not more than 1 000 g; a combination containing fountains shall have a net explosive content of not more than 3 000 g, of which not more than 1 000 g shall be contained in elements other than fountains; a battery containing fountains shall have a net explosive content of not more than 3 000 g. Bangers used in batteries or combinations shall have a total net explosive content of not more than 1 000 g. Flash bangers used in batteries or combinations shall have a total net explosive content of not more than 250 g.
Bengal flames	1	Not more than 20 g.
	2	Not more than 250 g.
	3	Not more than 1 000 g.
Bengal matches	1	Not more than 3,0 g.
Bengal sticks	1	Not more than 7,5 g.
	2	Not more than 50 g.
Christmas crackers	1	Not more than 16,0 mg report composition based on potassium chlorate and red phosphorous, or not more than 1,6 mg silver fulminate as report composition.

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Table 1 (continued)

Fireworks type	Cat.	Net explosive content
crackling granules	1	Not more than 3,0 g.
	2	Not more than 15 g.
double banger	2	Not more than 10,0 g black powder.
flash bangers	2	Not more than 1,0 g for nitrate/metal-based report composition or not more than 0,5 g for perchlorate/metal-based report composition.
	3	Not more than 10,0 g for nitrate/metal-based report composition or not more than 5,0 g for perchlorate/metal-based report composition.
flash pellet	1	Not more than 2,0 g.
	2	Not more than 30 g.
fountains	1	Not more than 7,5 g (for indoor use: pyrotechnic composition that is based on nitrocellulose with a mass fraction of not more than 12,6 % of nitrogen, with no additional oxidizing substances).
	2	Not more than 250 g, each whistle unit, if any, not more than 5,0 g.
	3	Not more than 1 000 g, each whistle unit, if any, not more than 20 g.
ground movers	2	Not more than 25 g, each pyrotechnic unit not more than 3,0 g, no report charge allowed.
ground spinners	1	Not more than, 5,0 g.
	2	Not more than 25 g and each pyrotechnic unit not more than 8,0 g.
jumping crackers	2	Not more than 10,0 g black powder.
jumping ground spinners	2	Not more than 25 g, each pyrotechnic unit not more than 5,0 g.
mines	2	Not more than 50 g; shall not contain more than five pyrotechnic units containing report composition and each of these pyrotechnic units shall not contain more than 5,0 g of black powder or 2,0 g of nitrate/metal-based report composition or 1,0 g of perchlorate/metal-based report composition. For mines with non-pyrotechnic objects not more than 8,0 g nitrocellulose, with a mass fraction of nitrogen of not more than 12,6 %.
	3	Not more than 200 g; shall not contain more than 25 pyrotechnic units containing report composition and each of these pyrotechnic units shall not contain more than 5,0 g of black powder or 2,0 g of nitrate/metal-based report composition or 1,0 g of perchlorate/metal-based report composition.
mini rocket	2	Not more than 1,5 g, not more than 0,13 g report composition.
novelty matches	1	Not more than 50,0 mg; shall only contain one report charge, if any; the report charge shall have a mean net explosive content of not more than 2,5 mg silver fulminate.
party poppers	1	Not more than 16,0 mg of pyrotechnic composition that is based on potassium chlorate and red phosphorous.
rockets	2	Not more than 75 g; report and/or bursting charge, if any, shall be not more than 10,0 g of black powder or 4,0 g of nitrate/metal-based composition or 2,0 g of perchlorate/metal-based composition.
	3	Not more than 200 g; report and/or bursting charge, if any, shall be not more than 50 g of black powder or 20,0 g of nitrate/metal-based composition or 10,0 g of perchlorate/metal-based composition.

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Fireworks type	Cat.	Net explosive content
Roman candles	2	Not more than 50 g; each pyrotechnic unit not more than 10,0 g; shall not contain more than five pyrotechnic units containing report composition and each of these pyrotechnic units not more than 10,0 g of black powder or 4,0 g nitrate/metal-based report composition or 2,0 g perchlorate/metal-based report composition.
	3	Not more than 250 g; each pyrotechnic unit not more than 50 g; shall not contain more than ten pyrotechnic units containing report composition and each of these pyrotechnic units not more than 20 g of black powder or 8,0 g of nitrate/metal-based report composition or 4,0 g of perchlorate/metal-based report composition.
serpents	1	Not more than 3,0 g.
shot tubes	2	Not more than 25 g; mass of the report and/or bursting charge in the pyrotechnic unit: not more than 10,0 g of black powder or 4,0 g of nitrate/metal-based report composition or 2,0 g of perchlorate/metal-based report composition.
	3	Not more than 40 g; mass of the report and/or bursting charge in the pyrotechnic unit: not more than 20 g of black powder or 8,0 g of nitrate/metal-based report composition or 4,0 g of perchlorate/metal-based report composition.
snaps	1	Not more than 16,0 mg report composition based on potassium chlorate and red phosphorous, or not more than 1,6 mg silver fulminate as report composition.
sparklers	1	Not more than 7,5 g.
	2	Not more than 50 g.
spinners	2	Not more than 30 g.
table bombs	1	Not more than 2,0 g nitrocellulose, with a mass fraction of nitrogen of not more than 12,6 %.
throwdowns	1	Not more than 2,5 mg silver fulminate.
wheels	2	Not more than 100 g; each whistle unit, if any, not more than 5,0 g.
	3	Not more than 900 g; each single unit not more than 150,0 g; each whistle unit, if any, not more than 20,0 g.

6 Means of ignition**6.1 Permitted means of ignition (type test and batch test)**

Conformity to the following requirements in Table 2 shall be verified by visual examination.

Table 2 — Permitted means of ignition (type test and batch test)

Article	Protruding fuse	Ignition head	Sealing paper	Friction head
Aerial wheels	+	–	–	–
Bangers	+	+	–	+
Batteries/combinations	+	–	–	–
Bengal flames	+	+	+	–
Bengal matches	–	–	–	+
Bengal sticks	N.A.	N.A.	N.A.	N.A.
Christmas crackers	N.A.	N.A.	N.A.	N.A.
Crackling granules	+	–	–	–