



### 1.- CONFORMITY ASSESSMENT FINAL REPORT

- **Pyrotechnic articles included in the family:**
  - Category: T1, outdoor use only.
  - Type: Combination.
  - Subtype: Comet.
  - Trade name & Reference: Family 2.
- **Registration number:** 0163-T1-6180
- **EU Type Examination Certificate:** LOM 25PIRO1152
- **File number:** 25.518E
- **Manufacturer:** Liuyang Wenhua Mountain trading Co., Ltd.  
**Address:** Xianglong Village, Wenjiashi Town, 410300 Liuyang, Hunan (China).
- **Application date:** 2025-08-12
- **Receipt of samples date:** 2025-09-22
- **Receipt of technical documentation date:** 2025-08-12
- **TEST RESULTS:** EN 16256-3:2012

Clause	Subclause	Description	Requirement	Result	Passed (Yes/No/NA)
4	Construction				
	4.1	General requirements	When tested in accordance with EN 16256-5:2012, 6.2.2, the article dimensions shall be in accordance with the manufacturer's declaration.	According to manufacturer's declaration	Yes
	4.2	Permitted elements for combinations T1 indoor use	The following elements may be used in combinations T1 for indoor use: Bengal flares, Fountains, Theatrical flashes, Jets, dropping effects, Projection devices, Flame projectors, Fireballs, Rotating effects, Desensitized pyrotechnic compositions, Whistles, Split tubes.		NA
	4.3	Length of uncoated end of Bengal sticks	The uncoated end of Bengal sticks (handle) shall have a minimum length of 75 mm, when tested in accordance with 6.1.1 of EN 16256-5:2012.		NA
4	4.4	Material not permitted for T1 stage maroons	The following casing materials are not permitted for T1 Maroons: glass, ceramics, metals, wood, reinforced glass fibre, any other similar materials producing hard brittle fragments.		NA
5	Pyrotechnic composition		Table 2 Combination outdoor use only: Not more than 500 g Report: not more than 100 g Comet T1 outdoor use only: 25 g	Combination: Total: Max.: 500,0 g Report: 50,0g. Comet: Max.: 10,0 g Report: 1,0 g.	Yes

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• **TEST RESULTS: EN 16256-3:2012**

Clause	Subclause	Description	Requirement	Result	Passed (Yes/No/NA)
<b>Means of ignition</b>					
6	6.1	General requirements. Articles (T1 and T2) shall:	• provide means of ignition which are clearly visible or indicated by labelling or instruction	Clearly visible (Electric igniter)	Yes
			• be protected against accidental / premature ignition by adequate safety measures	Short-circuited leading wires ends	Yes
			• have a distinct visual/sound indication that ignition has occurred		Yes
			• have no delay before the first effect		Yes
	6.2	Initial fuses and electric igniters	The initial fuse or the electric igniter shall be supplied with the article.		Yes
			If provided as an integral part of the article, the attachment of the initial fuse shall be secure when tested in accordance with EN 16256-5:2012, 6.1.5		NA
6	6.3	Friction heads	For articles of category T1, when tested in accordance with EN 16256-5:2012, 6.5.2.2, the delay time shall be as specified by the manufacturer with a tolerance of $\pm 1$ s.		NA
			When tested in accordance with EN 16256-5:2012, 6.1.6, the friction head shall not ignite		NA
	6.4	Permitted means of ignitions for theatrical pyrotechnic articles T1	T1 articles: Table 4 T2 articles: all forms of ignition are permitted	Electric igniter	Yes
<b>Performance</b>					
7	Properties to be checked before functioning tests				
	7.1	7.1.1. Loose pyrotechnic composition after mechanical conditioning	When tested in accordance with EN 16256-5:2012, 6.12, the mass of loose pyrotechnic composition shall not exceed 100 mg for each tested item.	0,0 mg	Yes
			There shall be no holes, splits, dents or bulges in the body of the article case, except those technically necessary for the correct functioning of the article.		Yes
	7.1.2. Integrity.	There shall be no holes or splits in the end closures unless otherwise specified in the technical documents.		Yes	
		If the end closures are separate components, they shall be in place.		NA	
		For articles with a separate component (e.g. base of handle): these components shall be securely in place; if the handle is an integral part of the body, it shall be clearly identified.		NA	
		For combinations: each individual element shall be fixed in place, other than by the transmitting fuse(s) alone.		Yes	



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Clause	Subclause	Description	Requirement	Result	Passed (Yes/No/NA)
Properties to be checked during functioning tests					
7	7.2	7.2.1. Principal effects	When tested in accordance with EN 16256-5:2012, 6.15, the principal effects of each article shall conform to the effects described in EN 16256-1 and in the manufacturer's declaration	Produces directional visual and/or aural effect	Yes
		7.2.2. Functioning	When tested in accordance with EN 16256-5:2012, 6.15, all pyrotechnic articles shall function completely according to the manufacturer's declaration and shall be in accordance with the instruction for use.		Yes
			For combinations T1 indoor use: When tested in accordance with EN 16256-5:2012, 6.5, there shall be no visual or aural delay of such a duration that it can be confused with the end of functioning of the combination.		NA
		7.2.3. Stability during functioning	When tested in accordance with EN 16256-5:2012, 6.15, all free standing articles shall remain upright or in the intended position whilst functioning		Yes
		7.2.4. Effect dimensions	Articles T1 outdoor use. Table 5. Comet: not restricted	Effect distance(m): <b>Average: 37,6</b>  Radial effect distance(m): <b>Max: 27,8</b>  According to manufacturer's declaration	Yes
		7.2.5. Sound pressure level [dB(A <sub>MAX</sub> )]	When tested in accordance with EN 16256-5:2012, 6.4, no article shall produce a maximum A-weighted impulse sound pressure level (LA <sub>max</sub> ) exceeding 120 dB (AI) at the minimum safety distance.	Max.: 119,8 dB(AI) at 8 m	Yes



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Clause	Subclause	Description	Requirement	Result	Passed (Yes/No/NA)
7	7.2	7.2.6. Explosions and other failures	When tested in accordance with EN 16256-5:2012, 6.15, the article shall not produce an explosion damaging the integrity of the article unless specifically designed to do so.		Yes
			For combinations: the article shall not produce an explosion damaging the integrity of the article.		Yes
		7.2.7. Burning or incandescent matter	No burning or incandescent matter shall fall to the ground outside the safety distance when tested in accordance with EN 16256-5:2012, 6.10.		Yes
			Materials included in projection devices shall not: <ul style="list-style-type: none"> <li>• burn if directly exposed to a flame or spark or other potential source of fire,</li> <li>• be readily flammable (the flame goes out as soon as the fire cause disappears),</li> <li>• project any hazardous debris.</li> </ul>		NA
		7.2.8. Extinguishing of flames	Any flames caused by the functioning of the article shall be extinguished within 30 s of the article ceasing to function when tested in accordance with EN 16256-5:2012, 6.7.		Yes
		7.2.9. Projected debris	No hazardous debris from the article shall be projected outside the safety distance when tested in accordance with EN 16256-5:2012, 6.9.		Yes
7.2.10. Burning rate of pyrotechnic composition	Maximum burning rates for the following category T1 articles apply: <ul style="list-style-type: none"> <li>• Bengal flames: <math>\leq 10</math> g/s;</li> <li>• Bengal flares: <math>\leq 10</math> g/s;</li> <li>• Bengal sticks: <math>\leq 1</math> cm/s;</li> <li>• Smoke devices: <math>\leq 0,6</math> g/s (indoor and outdoor use) and <math>\leq 2</math> g/s ('for outdoor use only');</li> <li>• Theatrical fire: <math>\leq 10</math> g/s.</li> </ul> For loose compositions, the maximum burning rates for category T1 articles shall not exceed 2 cm/s.		NA		



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7			Unless otherwise designed, all articles shall remain intact after functioning		Yes
	7.3	Integrity to be checked after functioning tests	For line rockets: Testing shall be in accordance with the manufacturer's recommended testing procedure. In addition, the article shall not destroy the wire or the holder.		NA
	7.4	Minimum safety distances (MSD) for theatrical pyrotechnic articles T1	The minimum safety distance for articles of category T1 shall be calculated in effect and radial effect directions	MSD: 50 m	Yes
8	Primary pack or selection pack		Where a primary pack or selection pack is used, it shall be of a size to enable labelling and include the instructions for use.		NA

NOTE: "NA" means not applicable.



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### 2.- ASSESSMENT REPORT

#### • ASSESSMENT OF THE ESSENTIAL SAFETY REQUIREMENTS:

ESR	Description	Conform (Yes/No/NA)
1	Each pyrotechnic article must attain the performance characteristics specified by the manufacturer to the notified body in order to ensure maximum safety and reliability.	Yes
2	Designed and manufactured in such a way that it can be disposed of safely by a suitable process with minimum effect on the environment.	Yes
3	The pyrotechnic article must function correctly when used for its intended purpose.	Yes
3	Each pyrotechnic article must be tested under realistic conditions. If this is not possible in a laboratory, the tests must be carried out in the conditions in which the pyrotechnic article is to be used.	Yes
3	During transportation and normal handling, unless specified by the manufacturer's instructions, the pyrotechnic article should contain the pyrotechnic composition.	Yes
3	The following information and properties — where applicable — must be considered or tested:	
3.a	Design, construction and characteristic properties, including detailed chemical composition (mass and percentage of substances used) and dimensions.	Yes
3.b	The physical and chemical stability of the pyrotechnic article in all normal, foreseeable environmental conditions.	Yes
3.c	Sensitivity to normal, foreseeable handling and transportation.	Yes
3.d	Compatibility of all components as regards their chemical stability.	Yes
3.e	Resistance of the pyrotechnic article to moisture where it is intended to be used in humid or wet conditions and where its safety or reliability may be adversely affected by moisture.	NA
3.f	Resistance to low and high temperatures, where the pyrotechnic article is intended to be kept or used at such temperatures and its safety or reliability may be adversely affected by cooling or heating of a component or of the pyrotechnic article as a whole.	Yes
3.g	Safety features intended to prevent untimely or inadvertent initiation or ignition.	Yes
3.h	Suitable instructions and, where necessary, markings in respect of safe handling, storage, use (including safety distances) and disposal.	Yes
3.i	The ability of the pyrotechnic article, its wrapping or other components to withstand deterioration under normal, foreseeable storage conditions.	Yes
3.j	Specification of all devices and accessories needed and operating instructions for safe functioning of the pyrotechnic article.	Yes



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• **ASSESSMENT OF THE ESSENTIAL SAFETY REQUIREMENTS:**

ESR	Description	Conform (Yes/No/NA)
4	Pyrotechnic articles must not contain detonative explosives other than black powder and flash composition, except for pyrotechnic articles of categories P1, P2, T2 and fireworks of category F4 meeting the following conditions:	Yes
4.a	The detonative explosive cannot be easily extracted from the pyrotechnic article.	NA
4.b	For category P1, the pyrotechnic article cannot function in a detonative manner, or cannot, as designed and manufactured, initiate secondary explosives.	NA
4.c	For categories F4, T2 and P2, the pyrotechnic article is designed and intended not to function in a detonative manner, or, if designed to detonate, it cannot as designed and manufactured initiate secondary explosives.	NA
5.A.1	The manufacturer must assign fireworks to different categories according to Article 6 characterised by net explosive content, safety distances, noise level, or similar. The category must be clearly indicated on the label.	NA
5.A.1.a-i or 5.A.1.b-i or 5.A.1.c-i	The safety distance must be at least 1 or 8 or 15 m. However, where appropriate the safety distance may be less.	NA
5.A.1	The maximum noise level must not exceed 120 dB (A, imp), or an equivalent noise level as measured by another appropriate method, at the safety distance.	NA
5.A.1.a	For category F1 fireworks, the following conditions must be met:	
5.A.1.a-iii	Category F1 must not comprise bangers, banger batteries and flash banger batteries.	NA
5.A.1.iv	Throwdowns in category F1 must not contain more than 2.5 mg silver fulminate.	NA
5.A.2	Fireworks only constructed of materials which minimise risk to health, property and the environment from debris.	NA
5.A.3	The method of ignition must be clearly visible or must be indicated by labelling or instructions.	NA
5.A.4	Fireworks must not move in an erratic and unforeseeable manner.	NA
5.A.5	Fireworks of category F1, F2 and F3 must be protected against inadvertent ignition either by a protective cover, by the packaging, or by the construction of the article. Fireworks of category F4 must be protected against inadvertent ignition by methods specified by the manufacturer.	NA
5.B.1	Pyrotechnic articles must be designed in such a way as to minimise risk to health, property and the environment during normal use.	NA
5.B.2	The method of ignition must be clearly visible or must be indicated by labelling or instructions.	NA



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ESR	Description	Conform (Yes/No/NA)
5.B.3	The pyrotechnic article must be designed in such a way as to minimise risk to health, property and the environment from debris when initiated inadvertently.	NA
5.B.4	Where appropriate, the pyrotechnic article must function properly until the "use by" date specified by the manufacturer.	NA
5.C.1	Ignition devices must be capable of being reliably initiated and be of sufficient initiation capability under all normal, foreseeable conditions of use.	NA
5.C.2	Ignition devices must be protected against electrostatic discharge under normal, foreseeable conditions of storage and use.	NA
5.C.3	Electric igniters must be protected against electromagnetic fields under normal, foreseeable conditions of storage and use.	NA
5.C.4	The covering of fuses must be of adequate mechanical strength and adequately protect the explosive filling when exposed to normal, foreseeable mechanical stress.	NA
5.C.5	The parameters for the burning times of fuses must be provided with the article.	NA
5.C.6	The electrical characteristics (e.g. no-fire current, resistance, etc.) of electric igniters must be provided with the article.	NA
5.C.7	The wires of electric igniters must be sufficiently insulated and must be of sufficient mechanical strength, including the solidity of the link to the igniter, taking account of their intended use.	NA

- The pyrotechnic articles in the scope of this report fulfil the Essential Safety requirements of the Directive 2013/29/EU.

Getafe,  
*Digitally signed by:*

Certification Committee