

**COMMITTEE OF EXPERTS ON THE TRANSPORT OF
DANGEROUS GOODS AND ON THE GLOBALLY
HARMONIZED SYSTEM OF CLASSIFICATION
AND LABELLING OF CHEMICALS**

Sub-Committee of Experts on the

Transport of Dangerous Goods

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LISTING AND CLASSIFICATION

Confetti

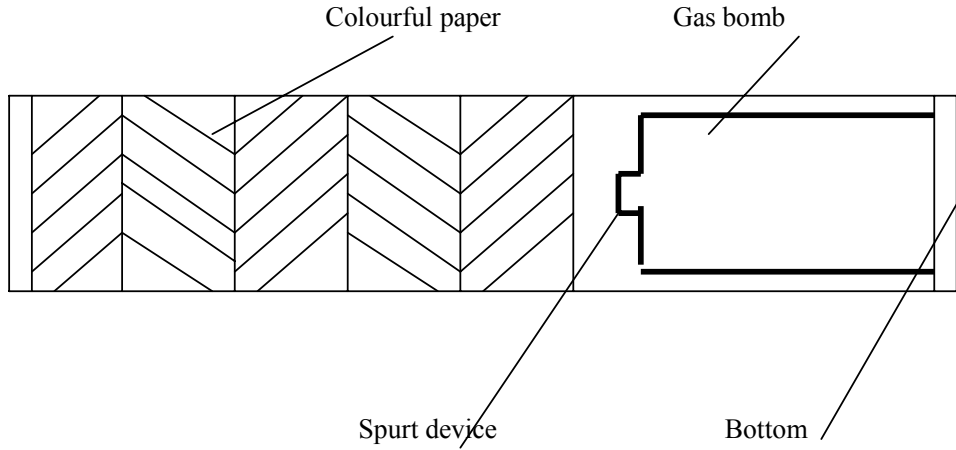
Transmitted by the expert from the People's Republic of China

Background

A new type of “confetti” appeared in recent years. It is an environmental protective production for ceremony. It is mainly used for kinds of celebration and entertainment activities both indoor and outdoor, such as wedding ceremony, entertainment party, opening ceremony, carnival demonstration, etc. It is used more and more popular as a substitute for fireworks because it contains no explosive, causes no chemical reaction and is safe and environmental protective compared with fireworks. There are nearly a hundred million U.S. dollars’ “confetti” exported from China each year, one fifth of them are sold to Europe, America and Asia. The amount of exported “confetti” is expanding of a rate at 20% per year.

This kind of “confetti” is powered by the release of compressed gas to spurt the “confetti” contents. The power is compressed nitrogen. The “confetti” contents are colourful paper, flame-resisting paper and aluminium tinsel which can be scattered. The structure of “confetti” is a cylinder divided into two parts (see the figure). The lower part is a spurt body fixed on the cylinder’s wall, and a seamless steel tube or high intensity polyethylene container for the gas. The higher part with an open top are full of the spurt contents. The contents are shaped paper (star-shaped, plum-shaped, heart-shaped; etc) rolled up layer upon layer systematically. When the compressed gas being released, the contents are spurted out of the cylinder and paper in different shapes scattered in the air. The atmosphere is very happy with nothing dangerous falling down.

But what is the risk of this kind of “confetti”? We think there are two aspects. One risk is that, because it uses compressed nitrogen, it has the characteristic of Division 2.2 “non-flammable and non-toxic gases” which means in detail “asphyxiant-gases which dilute or replace the oxygen normally is the atmosphere”. Will that be reasonable if we define “confetti” as Division 2.2-“nitrogen, compressed” (UNNo.1066). Apparently, this is not reasonable. Because the amount of nitrogen is very small, only 120 mL for each “confetti”. But the “confetti” has another more dangerous characteristic what we are going to discuss. This risk is, although the “confetti” spurts colourful paper and there’s no risk when the paper falling down, the compressed nitrogen power has a pressure of 2.2Mpa at most and the spurt height reaches nearly 30 meters. If it spurts towards a person or materials or facilities that are not impact resistance, or if it spurts backward from the lower part instead of spurting the colourful paper upwards, it must be very dangerous. When this kind of “confetti” was exported by air in 2000, the safety guard in the airport pulled the spurt device accidentally during routine examine and it spurted toward a person’s arms and made him injured.



Figure

Proposal

In view of the above two aspects of risks, we wish to make a proposal that this kind of “confetti” is a dangerous article and should be mentioned in the orange book. We think the second risk (the risk of spurt)is more dangerous than the first one (the risk of compressed nitrogen). We propose that it should be defined as dangerous article Class9.

Annex

DATA SHEET OF “CONFETTI”

Submitted by the People’s Republic of China

7 April 2002

Section 1. SUBSTANCE IDENTITY

- 1.1 Chemical name: not applicable
- 1.2 Chemical formula: not applicable
- 1.3 Other name/synonym: not known
- 1.4.1 UN number: for the Recommendations
- 1.4.2 CAS number: not applicable
- 1.5. Proposed classification for the Recommendations
 - 1.5.1 proper shipping name: UN No.×××× “confetti”
 - 1.5.2 class/division: 9 subsidiary risk: not applicable packing group: III
 - 1.5.3 proposed special provisions: there should be a pull-proof device on the spurt device
 - 1.5.4 proposed packing instructions: 4G□4C2□4A□4B□4D□4F□4H2.

Section 2. PHYSICAL PROPERTIES

- 2.1 Melting point or range: not applicable
- 2.2 Boiling point or range: not applicable
- 2.3 Relative density: not applicable
- 2.4 Vapour pressure: not applicable
- 2.5 Viscosity at 20°: not applicable
- 2.6 Solubility in water at 20°: not applicable
- 2.7 Physical state at 20°: solid
- 2.8 Appearance at normal carriage temperatures, including colour and odour: cylinder, colourful, tasteless
- 2.9 Other relevant physical properties:
specifications of “confetti”, pressure (gas bomb), volume(gas bomb), length, thickness (gas bomb), spurt height, weight as follow:

specific-ations	pressure (gas bomb)Mpa	volume(gas bomb)mL	length mm	thickness (gas bomb)mm	spurt height m	weight g
101	2.2	120	240	7	22-26	450
102	2.0	120	200	6.5	18-26	400
103	1.8	120	200	6	16-20	350
104	1.4	120	160	5.5	12-15	300
105	1.0	120	140	5	6-8	250
106	1.0	100	90	4.5	5	200
107	1.0	100	90	4	4	150

Section 3. FLAMMABILITY

- 3.1 Flammable vapour: not applicable
- 3.2 Autoignition temperature: not applicable
- 3.3 Flammability rang: not applicable
- 3.4 Is the substance a flammable solid? No

Section 4. CHEMICAL PROPERTIES

- 4.1 Does the substance require inhibition/stabilization or other treatment such as nitrogen blanket to prevent hazardous reactivity? no
- 4.2 Is the substance an explosive according to 2.1.1.1? no
- 4.3 Is the substance a desensitized explosive? no
- 4.4 Is the substance a self-reactive substance? no
- 4.5 Is the substance pyrophoric? no
- 4.6 Is the substance liable to self-heating? no
- 4.7 Is the substance an organic peroxide? no
- 4.8 Does the substance in contact with water emit flammable gases? no
- 4.9 Does the substance have oxidizing properties? no
- 4.10 Corrosivity: not applicable

Section 5. HARMFUL BIOLOGICAL EFFECTS

not applicable

Section 6. SUPPLEMENTARY INFORMATION

- 6.1 Recommended emergency action
 - 6.1.1 fire: water
 - 6.1.2 spillage: not applicable
 - 6.2 Is it proposed to transport the substance in:
 - 6.2.1 intermediate Bulk Containers: no
 - 6.2.2 portable tanks: no
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