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Chinese Fire Protection Safety Center Fire Protection Equipment Laboratory

# Fire Extinguisher Test Report

Client: APLUS MOLDS & PLASTICS CO., LTD

Model: 5LBI14

Report Date: August 26th, 2015

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### Fire Extinguisher Test Report

Application No: C104-055

Client: APLUS MOLDS & PLASTICS CO., LTD.

Address: No.63, Lane 350., Jhong Jheng Rd. Yong Kang Dist., Tainan City 71043, Taiwan.

Date of Authorization: August 10th, 2015

Report Source: Chinese Fire Protection Safety Center

Tel: 03-3222550

Laboratory Address: 5F, No.51, Housheng Rd., Luzhu, Taoyuan City 338, Taiwan.

Testing Laboratory: Fire Testing Laboratory

Test Site: (fire-refuge) No.48, Ln.156, Xinyi Rd., Guanyin Dist., Taoyuan City, 328, Taiwan. (fire-alarm)5F., No.51, Housheng Rd., Luzhu, Taoyuan City 338, Taiwan. (Note1)

Testing part: Fire Extinguisher

Model: 5LBI14

Manufacturer: APLUS MOLDS & PLASTICS CO., LTD.

Received Date: August 10, 2015

Test Date: August 12, 2015 - August 20, 2015

Test Method: Fire Extinguisher Approval Standard [Ministry of the Interior granted

Number 1020823751 on July 19, 2013]

Extinguishing Performance Test(B2)

Discharging performance test

Impact Test for Cylinder

Extinguishing agent leakage test

Nozzle

Pressurized gas cartridge

Operating mechanism view

Anti-corrosion and anti-rust processing test Note1

Cylinder thickness test

Gap, plug, fill cap and gasket

Hose

Impact test

Pressure gauge test

Vibration test Note1

Operating temperature test

Valve

### Disclaimer:

1. The report is responsible only for the test samples provided by the client.

2. The report consists of a total of 5 pages including the first cover. The Client could not divide to or use it separately. No copying or re-printing is allowed.

3. This report shall not be used as a commercial advertisement or litigation.

The title of [Chinese Fire Protection Safety Center Fire Protection Equipment Laboratory] could not be used in any Advertisements, flyers, product promotion files.

Inspection Engineer: 工程師莊家儀aboratory director: 無長洪文傑 Report signed by 副執行長洪嘉飛

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## Fire Extinguisher Test Report

Test item: Extinguisher efficiency value test

Test basis: Fire Extinguisher Approval Standard, Chapter one Section Four,

Chapter one Section thirty-five Table 10 to Table 13, promulgated by NFA.

Test method: Test requirements following chart 1.

Test result: Test results following chart 1.

Sample number	Standard requirement	Test result	
I	B-4	After discharging all of the extinguishing agent, the flame shall be extinguished and there shall be no reoccurrence of the flame within 1 minute.	

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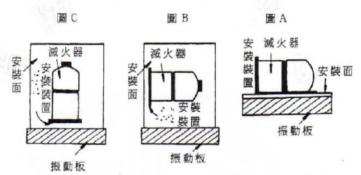
### Fire Extinguisher Test Report

Test item: Vibration test

Test basis: Fire Extinguisher Approval Standard, Chapter one Section twenty-nine,

promulgated by NFA.

Test method:Vehicular extinguisher shall be installed following the chart below, do the vibration for 2mm with 2000times/min up-down vibration test. It should take 2 hours to take Chart A and Chart B test and after 4 hours test for Chart C, no leakage, cracking, broken or deformation occurred during the test. If the fire extinguisher has fixation frame, it should use fixation frame instead of installation to do the test, no damage or barrier happened to fixation frame as well.



NOTE: Installation surface should be horizontal or vertical to the vibration board.

#### Test result:

Sample Number	Standard Requirement- Chart A	Test Result-Chart A		
П	No leakage, cracking, broken or deformation during the test.	No leakage, cracking, broken or deformation during the test.		

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### Fire Extinguisher Test Report

Test Item: Cartridge

Test Basis: Fire Extinguisher Approval Standard, Chapter one Section twenty-four, promulgated by NFA.

#### Test Method:

(1) If the cartridge over 100cm<sup>3</sup>, it should following rules below:

- 1. After fill in the gas, put the cartridge in to the warm water with 40°C and soaking it for two hours, no leakage is allowed during the test.
- 2. The cartridge installs in the container, the appearance of cartridge could not be corroded by the agents and the sign mark could not be come off.
- 3. The cartridge installs on the outside the container, it should be protected from the outside impulsive.
- 4. The CO2 volume in Cartridge, it should have more 1.5 cm<sup>3</sup>/G.
- 5. The seal of cartridge shall be ruptured when undergoing the water pressure test with pressure between 180 kgf/cm<sup>2</sup> and three fourths of the designed rupture pressure of the steel container.
- (2) If the cartridge below 100cm<sup>3</sup>, it should follow Fourteen(One) one to four and rules below:
  - 1. For filling in CO2 cartridge, it need to use 250kgf/cm<sup>2</sup> pressure to do the water pressure test for 2 minutes, no leakage or any expand. (For filling in Nitrogen cartridge, it need to use 5/3 times pressure to do the test)
  - 2. The seal of cartridge need to follow the Fourteen `(One) `1 pressure rules to do the water pressure test and it could not be damaged.
  - 3. When the seal of cartridge has been damaged, it could not have any dangerous occurred.

#### Test Result:

Sample Number	Standard Requirement			Test Result		
	Water pressure test	Volume	Filling Ratio	Water pressure test	Volume	Filling Ratio
III	No leakage and damage	≤100cm <sup>3</sup>	≥1.5cm <sup>3</sup> /g	No leakage and damage	65cm <sup>3</sup>	1.80cm <sup>3</sup> /g