

MULTIBRANDS INTERNATIONAL LIMITED
UNIT 2 JOWETT STREET BRADFORD BD1 2JX UNITED KINGDOM

The following sample(s) was / were submitted and identified on behalf of the client as:

Sample Description : EASYLITE DISPOSABLE LIGHTER
Style / Item No. : EASYLITE
Supplier : MULTIBRANDS
Country of Destination : EU&USA
Test Performed : Selected test(s) as requested by applicant
Sample Receiving Date : Jan 09, 2009
Test Performing Date : Jan 09, 2009 to Feb 27, 2009
Test Result(s) : For further details, please refer to the following page(s)

Signed for and on behalf of
SGS-CSTC Co., Ltd.



Sunny Sun
Engineer

Test Conducted: Base on ISO 9994: 2005+A1:2008 – Lighter – Safety Specifications

1. Scope

This International Standard establishes requirements for lighters to ensure a reasonable degree of safety for normal use or reasonably foreseeable misuse of such lighters by users.

The safety specification given in this International Standard applies to all flame-producing products commonly known as cigarette lighters, cigar lighters and pipe lighters. It does not apply to matches, nor does it apply to other flame-producing products intended solely for igniting materials other than cigarettes, cigars, and pipes. Lighters, being flame-producing devices, can, as do all flame sources, present a potential hazard to users.

The safety specification given in this International Standard cannot eliminate all hazards, but is intended to reduce potential hazards to users.

2. Test Sample: 50 pieces

3. Test Result: detail shown as following table

Clause	Test Requirements	Result
3	Functional requirements	
3.1	Flame generation Lighters shall require a deliberate manual operation to produce a flame. This operation shall conform to at least one of the following requirements: a) positive action on the part of the user shall be required to generate and maintain a flame; b) two or more independent actions by the user shall be required to generate a flame; c) an actuating force, not less than 15 N, shall be required to generate a flame.	Pass
3.2	Flame height	
3.2.1	Non-adjustable lighters Non-adjustable fluid lighters shall not be capable of producing a flame height greater than 120 mm when tested in accordance with 5.2. Non-adjustable, postmixing and premixing burner lighters shall not be capable of producing a flame height greater than 50 mm when tested in accordance with 5.2.	NA
3.2.2	Adjustable lighters For adjustable lighters, the maximum flame height that a user will obtain under different conditions of use shall comply with the following requirements when tested in accordance with 5.2: a) Adjustable postmixing burner lighters shall have the flame height adjusted by the manufacturer in such a manner that the lighter, when first ignited by the user, without changing the adjustment, will not produce a flame height greater than 100 mm. b) Adjustable postmixing burner lighters shall not be capable of producing a flame height greater than 120 mm when deliberately adjusted by the user to the manufacturer's design limit for maximum flame height. c) Adjustable premixing burner lighters shall have the flame height adjusted by the manufacturer in such a manner that the lighter, when first ignited by the user, without changing the adjustment, will not produce a flame height greater than 60 mm. d) Adjustable premixing burner lighters shall not be capable of producing a flame height greater than 75 mm when deliberately adjusted by the user to the manufacturer's design limit for maximum flame height. e) Adjustable postmixing and premixing burner lighters shall not be capable of producing a flame height greater than 50 mm when set at the lowest possible flame height. f) Automatically adjusting pipe lighters shall not be capable, in any position, of producing a flame height greater than 100 mm. g) The maximum attainable flame height for lighters shall be limited by pre-setting or by product design, or both.	Pass

Clause	Test Requirements	Result
3.3	<p>Flame-height adjustment</p> <p>a) Adjustable lighters shall require a deliberate action on the part of the user either to decrease or to increase the flame height when used in the normal manner. Adjustable lighters shall bear an indication showing the direction of movement of the adjusting mechanism required to produce a higher or lower flame.</p> <p>b) On lighters whose adjusting mechanisms conform to 3.3.3 and 3.3.4, the direction of movement shall be permanently imprinted or engraved on the lighter in the vicinity of the adjusting mechanism and readily visible and understandable.</p> <p>c) Gas lighters having rotary-movement flame-control actuators approximately at right-angles to the flame shall perform as follows: when the flame-control actuator is at the top of the lighter and the lighter is held so that the flame is oriented vertically upward, and the user is facing the flame-control actuator, moving the actuator to the left shall produce a decrease in flame height; When the flame-control actuator is at the bottom of the lighter, and the lighter is held so that the user is facing the actuator, a clockwise movement shall produce a decrease in flame height.</p> <p>d) For gas lighters requiring movement of the flame-control actuator approximately parallel to the flame axis, the flame height shall decrease or increase in accordance with the direction of the movement.</p> <p>e) If the flame-control actuator protrudes from the body of the lighter, it shall require a minimum actuating force of 1 N applied over the entire range of adjustment in a tangential direction.</p>	Pass
3.4	<p>Resistance to spitting or sputtering and flaring</p> <p>When set at the maximum flame height, gas lighters shall exhibit no spitting, sputtering, or flaring, when tested in accordance with 5.3.</p>	Pass
3.5	<p>Flame extinction</p> <p>When a lighter is extinguished in the intended manner, it shall meet the following requirements with respect to extinction time.</p> <p>a) Non-adjustable fluid and postmixing burner lighters, at their permanently set flame heights, when tested in accordance with 5.4, shall have any exposed flame completely extinguished within 2 s after a 10 s burn.</p> <p>b) Adjustable postmixing burner lighters, when tested in accordance with 5.4, shall have any flame completely extinguished within 2 s</p> <ol style="list-style-type: none"> 1) after a 10 s burn when set at a flame height of 50 mm, or the maximum flame height the adjustment allows if lower than 50 mm; 2) after a 5 s burn when set at maximum flame height. <p>c) In the case of postmixing burner lighters that have shields, an additional 2 s afterburn (i.e. continuous burning) is acceptable if the flame, during this additional 2 s period, does not extend above the shield.</p> <p>d) Non-adjustable premixing burner lighters, at their permanently set flame heights, when tested in accordance with 5.4, shall have any flame completely extinguished in no more than 5 s.</p> <p>e) Adjustable premixing burner lighters, when tested in accordance with 5.4, shall have any flame completely extinguished in no more than 5 s</p> <ol style="list-style-type: none"> 1) after a 10 s burn when set at a flame height of 50 mm, or the maximum flame height the adjustment allows if lower than 50 mm; 2) after a 5 s burn when set at maximum flame height. 	Pass

Clause	Test Requirements	Result
3.6	Volumetric displacement For gas lighters shipped with fuel, the liquid portion of the fuel shall not exceed 85 % of the volumetric capacity of the fuel reservoir when tested in accordance with 5.7.	Pass
4	Structural integrity requirements	
4.1	External finish Lighters shall have no external sharp edges that could cause accidental cuts or abrasions to the user when handled or used in the intended manner.	Pass
4.2	Compatibility with fuel a) Components of fluid lighters that come into contact with the fuel recommended by the manufacturer shall not, after extended contact with that fuel, deteriorate so as to cause the lighter to fail any of the criteria contained in this specification, when tested in accordance with 5.5. b) Components of gas lighters that come into contact with the fuel recommended by the manufacturer shall not deteriorate after exposure to the fuel, so as to cause the lighter to fail any of the criteria contained in this specification or allow gas escape exceeding 15 mg/min, when tested in accordance with 5.5. c) Lighters that meet the requirements of 4.2.1 and 4.2.2 and that are able to be ignited in the intended manner shall subsequently meet all the applicable requirements of 3.1 to 3.5, inclusive.	Pass
4.3	Resistance to fuel loss a) Refillable fluid lighters having a sealed fuel reservoir shall have a sealing closure which shall prevent loss or leakage of fuel from both the sealed reservoir and the sealing closure when such sealing closure is installed in the lighter by the user in the intended manner, when tested in accordance with 5.6. b) Refillable gas lighters shall have a pressurized fuel reservoir whose refilling valve shall be secure enough to prevent an escape of gas exceeding 15 mg/min, when tested in accordance with 5.6.	NA
4.4	Resistance to dropping a) Without impairing their subsequent safe operation, lighters shall be capable of withstanding three separate (1,5 ± 0,1) m drops conducted in accordance with 5.8: 1) without fuel reservoir rupture/fragmentation and 2) without sustained self-ignition as defined in 2.18. In addition, for gas lighters, gas escape shall not exceed 15 mg/min. b) Lighters that meet these requirements and that are able to be ignited in the intended manner shall subsequently meet all the applicable requirements of 3.1 to 3.5, inclusive.	Pass
4.5	Resistance to elevated temperature a) Gas lighters, and fluid lighters with a sealed compartment filled with non-absorbed fuel, shall be capable of withstanding a temperature of 65 °C for 4 h when tested in accordance with 5.9. b) Lighters that meet this requirement, and that are able to be ignited in the intended manner, shall after stabilization at a temperature of (23 ± 2) °C subsequently meet all the applicable requirement of 3.1 to 3.5, inclusive.	Pass
4.6	Resistance to internal pressure Gas lighters shall be capable of withstanding an internal pressure of twice the vapour pressure at 55 °C of the fuel recommended by the manufacturer.	Pass

Clause	Test Requirements	Result
4.7	<p>Burning behaviour</p> <p>a) The following types of lighter shall be capable of withstanding a burning time of 5 s when held in a position such that the top of the wick, or burner valve orifice, is at an angle 45° below the horizontal, without evidence of any burning or distortion of components so as to cause a hazardous condition: adjustable gas lighters, with the flame height set at maximum.</p> <p>b) The following types of lighter shall be capable of withstanding a burning time of 10 s when held in a position such that the top of the wick, or burner valve orifice, is at an angle of 45° below the horizontal, without evidence of any burning or distortion of components so as to cause a hazardous condition:</p> <ol style="list-style-type: none"> 1) fluid lighters; 2) non-adjustable gas lighters at their permanently set flame heights; 3) adjustable gas lighters, with the flame height set at 50 mm, or the maximum flame height the adjustment allows if lower than 50 mm. 	Pass
4.8	<p>Resistance to cyclic burning</p> <p>The following types of lighter shall be capable of withstanding a burning time of 20 s — repeated 10 times — when tested in accordance with 5.11:</p> <ol style="list-style-type: none"> a) fluid lighters; b) non-adjustable gas lighters at their permanently set flame heights; c) adjustable gas lighters, with the flame height set at 50 mm, or the maximum flame height the adjustment allows if lower than 50 mm. <p>Lighters that meet this requirement, and that are still able to be ignited in the intended manner, shall subsequently meet all the applicable requirements of 3.1 to 3.5, inclusive.</p>	Pass
4.9	<p>Resistance to continuous burning</p> <p>The following types of lighter shall be capable of withstanding a continuous burning time of 2 min with the flame in a vertically upward position without causing a hazardous condition, when tested in accordance with 5.12:</p> <ol style="list-style-type: none"> a) fluid lighters; b) non-adjustable gas lighters at their permanently set flame heights; c) adjustable gas lighters, with the flame height set at 50 mm, or the maximum flame height the adjustment allows if lower than 50 mm. 	Pass
6	Instructions and warnings	
6.1	<p>General</p> <p>All lighters shall be accompanied by appropriate safety information (instructions or warnings, or both), either in text form or in the form of safety symbols that would replace all existing textual instructions and warnings, or both, communicating to the user the proper method of usage.</p>	Pass
6.2	<p>Location</p> <p>The safety information shall be either on the lighter itself, or in a separate brochure or pamphlet packed with the lighter, or on the consumer product packaging provided for the point of sale. This information shall emphasize the warnings that are most appropriate to the type of lighter. The safety information shall be conspicuously placed, with a contrasting background, colour, type size or style distinct from other information.</p>	Pass
6.3	<p>Content</p> <p>a) For all lighters, the safety information shall be accompanied by the specific word “WARNING” in close proximity to the safety information and shall contain the following statements: “KEEP AWAY FROM CHILDREN” or “KEEP OUT OF REACH OF CHILDREN”. (The statement used shall be emphasized and distinctive.) “Ignite lighter away from face and clothing”.</p>	

Clause	Test Requirements	Result
6.3	<p>Content The safety information shall include the substance of the following, as appropriate to the type of lighter:</p> <ol style="list-style-type: none"> 1) "Contains flammable gas under pressure". 2) "Contains flammable fluid". 3) "When filled, will contain flammable fluid". 4) "Never expose to heat above 50 °C or to prolonged sunlight". 5) "Never puncture or put in fire". 6) "Be sure flame is out after use". 7) "This lighter does not self-extinguish-close cover to put out". (This statement shall cover all non-self-extinguishing lighters.) 8) "Extreme heat is present above the visible flame. Extra care should be taken to prevent burn injury or fire." (This statement shall accompany all premixing burner lighters.) 9) "Do not keep lit for more than 10 s." (This statement shall accompany all premixing burner lighters.) 	Pass
6.4	<p>Safety symbols If safety symbols are used, they shall comply with relevant requirements.</p>	NA
6.5	Refilling instructions	
6.5.1	<p>General Refillable lighters shall be accompanied by specific instructions and warnings, as applicable, in accordance with 6.5.2 or 6.5.3, respectively.</p>	NA
6.5.2	<p>Fluid lighters Refillable fluid lighters shall be accompanied by the substance of the following instructions:</p> <ol style="list-style-type: none"> a) "Fill only with ... [type of fluid recommended by the manufacturer]". b) "Fill slowly. Do not overfill". c) "After filling, wipe lighter and hands dry before igniting". <p>(This instruction shall appear on a label attached to the lighter, or shall be printed directly on the lighter.)</p>	NA
6.5.3	<p>Gas lighters Refillable gas lighters shall be accompanied by specific printed instructions as to the correct procedure to accomplish the refill operation safely. These instructions shall indicate the fuel recommended by the manufacturer and include the appropriate information to ensure proper mating between the refill container and the fuel reservoir of the lighter.</p>	NA
7	<p>Product marking All lighters shall bear a permanent logo or name that identifies the manufacturer or distributor.</p>	Pass

Remark:

1. NA --Not applicable
2. Photo appendix is included.
3. The original test report Reference No. GZHGR2009000650, issued date: Feb 27, 2009, was modified on Mar 06, 2009 according to original applicant`s requirements , Following changes are included :
(1)Change of Sample Description
(2)Delete the Buyer's name
4. This test report is to supersede test report number GZHGR2009000650

End of Report