TESTING CENTER GLOBALTEST
Republic of Bulgaria
31 Krushovski vrah Str., 1618 Sofia city

TEST REPORT № RA104081 - 20/March/2026

Tests of lighters, according to requirements of
EN 13869:2016 "Lighters - Child safety requirements for lighters - Safety requirements and test methods

Certifcate of accreditation № AT-2621 / November 25, 2024, valid until October 2, 2026
Issued by ANSI National Accreditation Board (ANAB), USA, according to ISO/IEC 17025:2017

Description of lighters	Plastic electronic gas lighter, flame type - jet flame, without safety mechanism with wind proof push down button for flame generation, piezo ignition mechanism, oval shape in blue and black colour, refillable, model: LUMIO SOFT 20.126, LUMIO 20.125, FUMA 20.127, dimensions: 81/24/12 mm, average weight 17g (empty). The child-resistant function is achieved by a minimum operating force to use the ignition mechanism (piezo ignition).
Photos of lighters	
Applicant & Importer:	**PUBLIK DOO** No.469 Vladike Nikolaja, 14000 Valjevo - Serbia
Name of the producer (origin)	[redacted]
Method of arrival of test item	The sample was delivered by the client via courier company "Speedy", waybill 1-00051977795151-1420009011127 on February 11, 2026
Application for testing	From February 11, 2026
Period of testing	From February 27, 2026 until March 19, 2026
Documents, submitted with the sample	1. Certificate for ISO 9994:2018 - № RN59775, issued by IC Globaltest Ltd. on February 27, 2026
Test method:	EN 13869:2016, p.4.5.2.3

Feasibility check before conducting the study

Requirement of point 4.2	Requirement of point 4.3	Requirement of point 4.4
☒ Conform	☒ Conform	☒ Conform
☐ Does not conform	☐ Does not conform	☐ Does not conform

Results after conducting the study:	**ACCORDING TO THE TESTS PERFORMED, SHOWN ON THE NEXT PAGES, THE MODEL, DESCRIBED ABOVE,** **FULFILLS THE REQUIREMENTS OF P.4.5.2.3 OF EN 13869:2016 ''Lighters – Child-resistance for lighters – safety requirements and test methods".**

Approved by:
Lab Manager:
dipl.eng. Dimitar Tanev
Electronic signature: DIMITAR DIMITROV TANEV

Digitally signed by DIMITAR DIMITROV TANEV
Date: 2026.03.20 09:57:21 +02'00'

TEST REPORT

1. *Description of the lighters, used for the test with child*

For conducting this test, surrogate lighters are used, which represents lighter, identical to the original one; the surrogate lighter has no fuel and does not produce flame. It can produce a signal, such as a "click", which shows that the surrogate lighter is active and is in a flame-producing mode.
For this test 6 surrogate lighters have been prepared, labelled with sequential numbers 1 to 6, as shown in the picture. According to client's data: the empty lighter has a mean weight of 17g.

For conducting the test, six surrogate lighters with numbers from 1 to 6 are used, according to section 5.5 from EN 13869. All the six surrogate lighters are used an equal number of times in panel of 2 children for the entire test forming the whole 100 children panel.
In case that the surrogate lighters 1 to 6 incl. are damaged or out of use during the test, other surrogate lighters have to be used.
Before conducting the test each surrogate lighter was checked for capability of producing a signal.
After the test, the surrogate lighters will be kept 3 (three) years in TC Globaltest archives.

2. *Persons, conducting the test /testers/*

Five persons conducting the test are involved, supervised by a leader. All of the persons are at least 18 years old and are fluent in Bulgarian language, according to section 5.4.3. of the standard.
All the persons, involved in the test, are IC GLOBALTEST Ltd. employees. The leader of the test is Dimitar Tanev - IC GLOBALTEST manager.

3. *Place for conducting the test*

For conducting this test, a panel of 100 children is used, situated in Sofia city, Republic of Bulgaria. The panel used is according to section 4.5.2.3 ot EN13869.
The test was conducted in a room that is familiar to the children, well-lit and free from distraction. This room allowed the children to move free. The sitting places of the children are considered with the

children's size so they can feel comfortable, according to the requirements of section 5.4.2 of the standard.

4. Children, participating in the test

Written informed consents, allowing the children to participate in the test, were obtained from their parents or legal guardians before the test. All informed consents will be kept 3 (three) years in IC Globaltest archives.
For conducting this test, children aged from 42 to 51 months participated - boys and girls, divided according to 5.3 by EN 13869. The Bulgarian language is native language for all the children, participating in the test. No child with a permanent or temporary illness, injury or handicap was selected for participation in the test.
During the test, none of the children declined to participate. No child participated in more than one test and no child participated in more than one test during one day. Number of children participating in the test – 100 children.

5. Conducting the test

The test was conducted based on section 4.5.2.3 of EN 13869. The persons, conducting the test, are trained to encourage the children and to talk with them with a friendly tone. The language used during the tests is Bulgarian. The testers explain to all of the participants that the test is not a game. Encouragement of the children was done according to section 5.6 of the standard.
The test was performed in three different kindergartens. All the children, participating in the test, were familiar with the premises in the kindergartens.

For the purpose of this test, a registration file for all the participants were prepared. The file contains the following data: sex, date of birth, age in months, the number of the lighter, used by the child, the name of the person who conducted the test and the name of the leader. All the data was filled after finishing the test with each of the panel, so the children could not disperse during the test. The photographs were also taken during the test in a manner to hide the face of children and not to distract them. Registration files of the participants will be kept in the IC GLOBALTEST archives.

The position of the tester is according to requirements in the standard. Before beginning of the test the children were asked to listen carefully the instruction of the tester. The procedure was performed according to section 5.8. of the standard. After the explanation, the surrogate-lighters were distributed to the children. The testers gave the children a five minute period to try to produce a signal with the surrogate-lighters.

Those, who succeeded, were asked to return the lighters and wait until the other children are finished. Those, who failed in producing a signal in the first 5 minutes, were given another 5 minutes to conduct with the surrogate-lighters. At the end of the second 5 min test period nine of the children succeeded in producing a signal.
During the test period, the children were not allowed to operate with other children's lighters.

After the test, the children were told that operating with lighters is dangerous, but these are special lighters that do not produce fire, and could not harm them or burn them. The testers asked the children to promise that they will never try to produce a signal with a real lighter. The testers waited for an affirmative response from each child and then thanked the children for helping.

5.1. Full description of the lighter and information from section 8.1b of EN13869

Size acc.to specification – 81/24/12 mm;
Shape – Oval;
Weight (empty lighter) ~ 17 g;
Fuel – Gas Butane;
Fuel capacity ~ 3.24 ml;
Ignition mechanism – Piezo ignition;
Minimum force needed to ignite (N) – 34N;
Child-resistant elements that makes the lighter child-resistant: - ;
Tolerances – No tolerances are given.

6. Test results

In the 100-child test panel – **nine** children demonstrated successfully operating with surrogate lighters. That is **9** of all participants, which eliminates the need for conducting the test with a second 100-child panel.

Child of age 44 months, female – successfully on the 157 sec;
Child of age 47 months, female – successfully on the 123 sec;
Child of age 49 months, female – successfully on the 97 sec;
Child of age 50 months, female – successfully on the 72 sec;
Child of age 44 months, male – successfully on the 179 sec;
Child of age 46 months, male – successfully on the 102 sec;
Child of age 49 months, male – successfully on the 114 sec;
Child of age 50 months, male – successfully on the 89 sec;
Child of age 51 months, male – successfully on the 95 sec;

The lighters substituted by surrogate lighters conforms to child-resistant standard and the test is successful according p.4.5.2.3 of EN 13869:2016.

7. Persons, conducting the test /testers/

Dipl. Eng. Yana Georgieva, MChem. Ivan Givechev, MChem. Stanimira Atanasova, Emil Mitev

Leader of the test: Dipl. Eng. Dimitar Tanev

This test report is approved by Dipl.Eng Dimitar Tanev – Laboratory Manager

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Note: This document is an original. It is issued as an electronic document in pdf format. It can be verified only via request sent to office@globaltest-bg.com