

INTERNATIONAL ELECTROTECHNICAL COMMISSION

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**IEC 60079-29-1**  
Edition 2.0 2016-07

**EXPLOSIVE ATMOSPHERES –**

**Part 29-1: Gas detectors –  
Performance requirements of detectors for flammable gases**

**INTERPRETATION SHEET 2**

This interpretation sheet has been prepared by IEC technical committee 31: Equipment for explosive atmospheres.

The text of this interpretation sheet is based on the following documents:

DISH	Report on voting
31/1457/DISH	31/1467/RVDISH

Full information on the voting for the approval of this interpretation sheet can be found in the report on voting indicated in the above table.

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In accordance with Administrative Circular AC/42/2004: New procedures for Interpretation of standards, Annex 2: New text for ISO/IEC Directives (IEC Supplement), there has been a request for formal interpretation of the required testing for each general purpose test gas for performance standard IEC 60079-29-1:2016, Subclause 5.3.2 (c), by the Australian National Committee. The requirement is stated as follows:

- c) Methane, and propane or butane for equipment intended for general purpose flammable gas detection (in order to get representative results, e.g. concerning sensitivity, response times and drift).

**Question:**

Is the interpretation of this text that propane or butane required tests are only Calibration and adjustment (5.4.3), Short-term stability (5.4.4.2), and Time of response (5.4.15)?

**Interpretation:**

No, for general purpose equipment evaluation to two gases is essential in order to get representative test results. Therefore, all tests need to be conducted for the two gases unless otherwise specified (e.g. EMC as outlined in IEC 60079-29-1/AMD1:—<sup>1</sup>).

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<sup>1</sup> Under preparation. Stage at the time of publication: IEC/CCDV 60079-29-1/AMD1:2019.