**BS EN 60079-10-1:2015**
*Incorporating corrigendum December 2016*

BSI Standards Publication

# Explosive atmospheres

## Part 10-1: Classification of areas — Explosive gas atmospheres

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## National foreword

This British Standard is the UK implementation of EN 60079-10-1:2015. It is identical to IEC 60079-10-1:2015, incorporating corrigendum November 2015. It supersedes BS EN 60079-10-1:2009 which is withdrawn.

IEC corrigendum November 2015 corrects Equation B.6.

BSI, as a member of CENELEC, is obliged to publish EN 60079-10-1 as a British Standard. However, attention is drawn to the fact that during the document's development, the UK committee voted against its approval as a European Standard.

The UK Committee has some concerns that the methodologies in the Informative Annexes C and D for determining zone type and extents have not been appropriately validated as required in Section 5.2., and suggest users consider the below issues when working with this standard:

- The ventilation rate (volume of air per unit time) relative to the release rate of the flammable substance is the most important factor that determines the ability of a release in an enclosure to become dilute. The 'ventilation velocity' has only a secondary effect: the UK Committee's view is that this is not adequately reflected in the standard.
- The extent of flammable gas or vapour from its point of release is dependent on the material being released, the release conditions (e.g. hole size and pressure) and the environment into which it is being released (e.g. ventilation rate or weather conditions). Various scientifically based approaches exist for determining these zone extents, including industry specific standards and dispersion models.
- EN 60079-10-1 places no limitations on a Zone 2 NE classification. However the UK committee believes a Zone 2 NE classification would only be applicable for a source pressure less than 10 barg which is the limit accepted in other industry based guidance.
- For assessment of pool evaporation from volatile hydrocarbons, other standards and sources of information need to be used to cross-check the results to ensure that risks are reduced to as low as reasonably practicable.

The UK Committee will revisit these issues during the next revision cycle of this standard, rather than publishing a national annex as previously stated.

The UK participation in its preparation was entrusted by Technical Committee EXL/31, Equipment for explosive atmospheres, to Subcommittee EXL/31/3, Codes of practice.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.


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**Compliance with a British Standard cannot confer immunity from legal obligations.**