

Frage

Gibt es in der deutschen Ausgabe der DIN EN IEC 60079-10-1 das Kapitel 4.4.2 und den Punkt 3.3.8 Zone NE?

Antwort:

Ja, in der deutschen Ausgabe der DIN EN IEC 60079-10-1 sind sowohl das Kapitel 4.4.2 als auch der Begriff 3.3.8 Zone NE enthalten.

- **Kapitel 4.4.2** behandelt Bereiche von **vernachlässigbarem Ausmaß** (Zone NE). Diese Zonen sind so klein, dass eine Entzündung nur minimale Auswirkungen hätte.

4.4.2 Zone of negligible extent

In some cases a zone of negligible extent (NE) may arise and may be treated as non hazardous. A zone of negligible extent would also imply either a negligible release rate or a negligible release quantity and considering the volume for dispersion.

Such a zone implies that an explosion, if it takes place, will have negligible consequences. The zone NE concept can be applied irrespective of any other adjustments for risk assessment to determine EPL.

The criteria for a zone NE classification should be based on the following factors:

- i) Ignition would not result in sufficient pressure to cause harm either due to the pressure wave or due to damage that could cause flying objects or particles e.g. broken glass from windows.
- ii) Ignition would not result in sufficient heat to cause harm or a fire from surrounding materials.
- iii) For gas distributed at pressures above 1 000 kPag (10 barg) consideration shall be given to a specific risk assessment
- iv) A zone NE shall not be applied to gas distributed at pressures above 2 000 kPag (20 barg) unless a specific detailed risk assessment can document otherwise.

An example of zone NE is a natural gas cloud with an average concentration that is 50 % by volume of the LFL and that is less than 0,1 m³ or 1,0 % of the enclosed space concerned (whichever is smaller). For other gases a zone NE may be considered based on the ratio of the heat of combustion, maximum explosion pressure and the maximum rate of pressure rise of the gas to methane multiplied by the parameters used for methane.

NOTE 1 Natural gas in this context is gas used for conventional gas distribution networks and is predominately methane.

NOTE 2 Refrigeration and heat pump applications are not regarded as gas distribution systems. Risk assessments for this class of equipment have demonstrated that the value of 2 000 kPag (20 barg) might not be a suitable reference for these applications.

- **Abschnitt 3.3.8** definiert **Zone NE** als einen Bereich von vernachlässigbarem Ausmaß, in dem eine potenzielle Entzündung keine nennenswerten Konsequenzen hätte. Solche Zonen können als **Zone 0 NE**, **Zone 1 NE** oder **Zone 2 NE** klassifiziert werden.

3.3.8

Zone NE

zone of negligible extent such that if ignition did occur it would have negligible consequences

Note 1 to entry: Zones of negligible extent could be Zone 0 NE, Zone 1 NE or Zone 2 NE.

Diese Informationen sind in der internationalen Norm IEC 60079-10-1:2020 enthalten und wurden in die deutsche Fassung übernommen. [IEC Webstore](#)