ISA-TR12.24.01-1998 (IEC 79-10 Mod)



Recommended Practice for Classification of Locations for Electrical Installations Classified as Class I, Zone 0, Zone 1, or Zone 2



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## **Foreword**

This recommended practice is a modification of IEC 79-10, *Electrical Apparatus for Explosive Gas Atmospheres*, Part 10: Classification of <u>Hazardous Areas</u>, normalized as an American National Standard, with additional material added as appendices specifically for the classification of locations for electrical installations classified as Class I, Zone 0, Zone 1, or Zone 2 Classification of hazardous areas. U.S. National Deviations are shown by strikeout through text deleted and <u>underline</u> under text added. There are five annexes in this recommended practice. All annexes are Informative and are not considered part of this recommended practice.

### 1 General

# 1.1 Scope

This part of IEC 79 ISA-TR12.24.01 is concerned with the classification of hazardous areas where flammable gas or vapor risks may arise, in order to permit the proper selection and installation of apparatus for use in such hazardous areas (see Notes 1 and 4).

It is intended to be applied where there may be a risk of ignition due to the presence of flammable gas or vapor, mixed with air under normal atmospheric conditions (see Note 2), but it does not apply to:

- a) mines susceptible to firedamp:
- b) the processing and manufacture of explosives;
- c) areas where a risk may arise due to the presence of ignitable dusts or fibers;
- d) catastrophic failures which are beyond the concept of abnormality dealt with in this standard recommended practice (see Note 3);
- e) rooms used for medical purposes;
- f) areas where the presence of flammable mist may give rise to an unpredictable risk and which require special consideration (see Note 5).

This <u>standard</u> <u>recommended practice</u> does not take into account the effects of consequential damage.

Definitions and explanations of terms are given together with the main principles and procedures relating to hazardous area classification.

For detailed recommendations regarding the extent of the hazardous areas in specific industries or applications, reference may be made to the codes, <u>standards</u>, <u>or recommended practices</u> relating to those industries or applications.