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NATIONAL STANDARD OF THE PEOPLE'S REPUBLIC OF CHINA

GB/T 3836.26-2019

Explosive atmospheres -- Part 26: Electrostatic hazards -- Guidance

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Foreword

The Explosive Environment is divided into several sections.

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--- Part 26. Guidelines for electrostatic hazards;

--- Part 27. Static electricity hazard test;

This section is Part 26 of "Explosive Environments".

This section is drafted in accordance with the rules given in GB/T 1.1-2009.

This part uses the redrafting method to modify and adopt IEC TS60079-32-1..2013 "Explosive Environment Part 32-1. Electrostatic Hazard

guide".

The technical differences between this part and IEC TS60079-32-1..2013 and their causes are as follows.

--- Regarding the normative references, this section has made adjustments with technical differences in order to apply China's technical conditions.

The situation is reflected in Chapter 2 "Regulatory Reference Documents", and the specific adjustments are as follows.

* Replace IEC 60093 with GB/T 1410 equivalent to the international standard;

* Replace ISO 284 with GB/T 3684 equivalent to the international standard;

* Replace IEC 60079-0..2011 with GB 3836.1 which adopts the international standard;

* Replace IEC 60079-20-1 with GB/T 3836.11 equivalent to the international standard;

* Replace IEC 60079-10-1 with GB 3836.14 equivalent to the international standard;

* Replace IEC 60079-14 with GB/T 3836.15 which adopts international standards;

* Replace IEC 60079-32-2..2015 with GB/T 3836.27-2019 that adopts international standards;

* Replace ISO 8031 with GB/T 9572 equivalent to the international standard;

* Replace IEC 60167 with GB/T 10064 equivalent to the international standard;

* Replace IEC 60079-10-2 with GB/T 12476.3 that adopts the international standard;

* Replace ISO 12100 with GB/T 15706 equivalent to the international standard;

* Use the European standard GB 25286.1 to replace EN13463-1;

* Replace ISO 16392 with GB/T 26277 which adopts international standard;

* Replace ISO 9563 with GB/T 32072 that adopts international standards;

* Replace ISO 21178 with GB/T 33204 equivalent to the international standard;

* Replace ISO 21179 with GB/T 34366 equivalent to the international standard;

* Replaced EN1360 with HG/T 3037, which adopted the European standard;

* Added references to GB/T 1408.1, GB/T 1408.2, GB/T 10715, GB 12476.1, GB/T 20023, GB/T 23165, EN1149 (all parts);

* Removed ASTM D257, ASTM D2624-07a, ASTM D4308-95, ASTM E582-88, ASTM E2019-03, BS5958 (all parts), BS7506-2, DIN51412-1, DIN51412-2, JNIOSHTR42, And move to references.

--- Amend the test methods 26.14 and 26.15 of IEC 60079-7..2007 cited in the text to GB/T 3836.27-2019

4.10 and 4.11, two test methods have been revised and included in GB/T 3836.27-2019.

--- The relevant parameters of gasoline and diesel in 7.8.3.1 have been modified to conform to China's actual situation.

The following editorial changes have been made in this section.

--- Incorporates the contents of IEC TS60079-32-1..2013/AMD1..2017;

--- Delete Appendix G "test", the content of the test part see GB/T 3836.27-2019;

--- Delete the notes in Chapter 6 and Appendix A about the test methods 26.14 and 26.15 in IEC 60079-7..2007;

--- Deleted the note on the capacity and capacity unit of conductive storage tank in 7.3.2.1;

--- Combine Table 9a) and Table 9b) into one table.

This section is proposed by China Electrical Equipment Industry Association.

This part is under the jurisdiction of the National Explosion-proof Electrical Equipment Standardization Technical Committee (SAC/TC9).

This section was drafted. Nanyang Explosion-proof Electric Research Institute Co., Ltd.,

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1 Scope

This section of the Explosive Environments provides guidelines for equipment, products, and processes to avoid electrostatic ignition and electrostatic shock hazards, and

Requirements for the safe use of equipment, products or processes.

This section applies to the risk assessment of electrostatic hazards, or used to develop electrical or non-electrical equipment standards or special product standards.

Consider electrostatic hazards that often cause problems in industrial processes and the environment. These processes include solid, liquid, powder, gas, spray

Handling of fog and explosives. For each case, determine the source and characteristics of electrostatic hazards and give specific treatment suggestions.

The purpose of this section is to provide standard recommendations for controlling static electricity, such as grounding conductors, reducing electrification, and limiting the electrified surface of insulation

product. In some cases, static electricity is part of the process, for example, electrostatic spraying, but at the same time the negative effects of static electricity are related to this part.

Note content. If the standard recommendations in this section can be met, the electrostatic discharge hazard in explosive environments can be reduced to an acceptable low level.

If the requirements of this section cannot be met, other methods that reach at least the same level of safety may be used.

Note. For a description of the causes of static electricity in solids, liquids, gases, explosives, and human bodies, and how static electricity can cause ignition or electrostatic shock, see Appendix A to this section.

And Appendix B and IEC /T R61340-1.

This section does not apply to electrostatic hazards related to lightning and damage to