

SLOVENSKI STANDARD
SIST-TP CLC/TR 60079-32-1:2019
01-maj-2019

Nadomešča:
SIST-TP CLC/TR 60079-32-1:2015

Eksplozivne atmosfere - 32-1. del: Elektrostatske nevarnosti - Navodilo (IEC/TS 60079-32-1:2013, IEC/TS 60079-32-1:2013/A1:2017)

Explosive atmospheres - Part 32-1: Electrostatic hazards, guidance (IEC/TS 60079-32-1:2013, IEC/TS 60079-32-1:2013/A1:2017)

Explosionsgefährdete Bereiche - Teil 32-1: Elektrostatische Gefährdungen, Leitfaden (IEC/TS 60079-32-1:2013, IEC/TS 60079-32-1:2013/A1:2017)

Atmosphères explosives - Partie 32-1: Risques électrostatiques - Guide (IEC/TS 60079-32-1:2013, IEC/TS 60079-32-1:2013/A1:2017) <https://standards.iteh.ai/standards/sist/131fl71a-19fc-46db-819e-4d8fla678aa7/sist-tp-clc-tr-60079-32-1-2019>

Ta slovenski standard je istoveten z: CLC/TR 60079-32-1:2018

ICS:

13.230	Varstvo pred eksplozijo	Explosion protection
13.260	Varstvo pred električnim udarom. Delo pod napetostjo	Protection against electric shock. Live working

SIST-TP CLC/TR 60079-32-1:2019 **en,fr,de**

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CLC/TR 60079-32-1

December 2018

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Supersedes CLC/TR 60079-32-1:2015

English Version

**Explosive atmospheres - Part 32-1: Electrostatic hazards,
guidance
(IEC/TS 60079-32-1:2013, IEC/TS 60079-32-1:2013/A1:2017)**

Atmosphères explosives - Partie 32-1: Risques
électrostatiques - Guide
(IEC/TS 60079-32-1:2013, IEC/TS 60079-32-
1:2013/A1:2017)

Explosionsgefährdete Bereiche - Teil 32-1: Elektrostatische
Gefährdungen, Leitfaden
(IEC/TS 60079-32-1:2013, IEC/TS 60079-32-
1:2013/A1:2017)

This Technical Report was approved by CENELEC on 2018-10-22.

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European Committee for Electrotechnical Standardization
Comité Européen de Normalisation Electrotechnique
Europäisches Komitee für Elektrotechnische Normung

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

European foreword

This document (CLC/TR 60079-32-1:2018) consists of the text of IEC/TS 60079-32-1:2013 and IEC/TS 60079-32-1:2013/A1:2017 prepared by IEC/TC 31 "Equipment for explosive atmospheres".

This document supersedes CLC/TR 60079-32-1:2015.

The technical specification IEC/TS 60079-32-1 is written as a general guidance document for products in general and process properties necessary to avoid ignition hazards arising from static electricity in a hazardous area.

The IEC standard IEC 60079-0 specifies the general requirements, including the requirements to avoid electrostatic charging, for construction, testing and marking of Ex equipment and Ex Components intended for use in explosive atmospheres.

In some cases, the requirements given in IEC 60079-0 are different from the information given in IEC/TS 60079-32-1.

It was decided to have all information also given complete in the guidance document and therefore the new Clause 14 was added to the IEC/TS 60079-32-1 summarizing the requirements given in IEC 60079-0 for Ex equipment and Ex-Components as additional information.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CENELEC shall not be held responsible for identifying any or all such patent rights.

Endorsement notice

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The texts of the International Technical Specifications IEC/TS 60079-32-1:2013 and IEC/TS 60079-32-1:2013/A1:2017 were approved by CENELEC as a Technical Report without any modification.

In the official version, for Bibliography, the following notes have to be added for the standards indicated:

https://standards.iteh.ai/catalog/standards/sist/131f171a-19fc-46db-819e-4d813678aa/sist-tp-clc-tr-60079-32-1-2019
IEC 60243-1
IEC 60243-2
IEC 60247
IEC 61340-2-1
IEC 61340-4-5
IEC 61340-4-7
ISO 8028
ISO 8330
ISO 13688
ISO 20344
ISO 20345

Annex ZA (normative)

Normative references to international publications with their corresponding European publications

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

NOTE When an international publication has been modified by common modifications, indicated by (mod), the relevant EN/HD applies.

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
IEC 60079-0	2011	Explosive atmospheres - Part 0: Equipment - General requirements	EN 60079-0	2012
IEC 60079-10-1	-	Explosive atmospheres - Part 10-1: Classification of areas - Explosive gas atmospheres	EN 60079-10-1	-
IEC 60079-10-2	-	Explosive atmospheres - Part 10-2: Classification of areas - Combustible dust atmospheres	EN 60079-10-2	-
IEC 60079-14	-	Explosive atmospheres - Part 14: Electrical installations design, selection and erection	EN 60079-14	-
IEC 60079-20-1	-	Explosive atmospheres - Part 20-1: Material characteristics for gas and vapour classification - Test methods and data	EN 60079-20-1	-
IEC 60079-32-2	2015	Explosive atmospheres - Part 32-1: Electrostatics hazards - Tests	EN 60079-32-2	2015
IEC 60093	-	Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials	HD 429 S1	-
IEC 60167	-	Methods of test for the determination of the insulation resistance of solid insulating materials	HD 568 S1	-
IEC 61340-2-3	-	Electrostatics - Part 2-3: Methods of test for determining the resistance and resistivity of solid planar materials used to avoid electrostatic charge accumulation	EN 61340-2-3	-
IEC 61340-4-1	-	Electrostatics - Part 4-1: Standard test methods for specific applications - Electrical resistance of floor coverings and installed floors	EN 61340-4-1	-
IEC 61340-4-3	-	Electrostatics - Part 4-3: Standard test methods for specific applications - Footwear	EN 61340-4-3	-
IEC 61340-4-4	2012	Electrostatics - Part 4-4: Standard test methods for specific applications - Electrostatic classification of flexible intermediate bulk containers (FIBC)	EN 61340-4-4	2012

CLC/TR 60079-32-1:2018 (E)

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
ISO 284	-	Conveyor belts - Electrical conductivity - Specification and test method	EN ISO 284	-
ISO 6297	-	Petroleum products - Aviation and distillate fuels - Determination of electrical conductivity	-	-
ISO 8031	-	Rubber and plastics hoses and hose assemblies - Determination of electrical resistance and conductivity	EN ISO 8031	-
ISO 9563	-	Belt drives - Electrical conductivity of antistatic endless synchronous belts - Characteristics and test method	-	-
ISO 12100-1	-	Safety of machinery - Basic concepts, general principles for design - Part 1: Basic terminology, methodology	EN ISO 12100-1	-
ISO 16392	-	Tyres - Electrical resistance - Test method for measuring electrical resistance of tyres on a test rig	-	-
ISO 21178	-	Light conveyor belts - Determination of electrical resistances	EN ISO 21178	-
ISO 21179	-	Light conveyor belts - Determination of the electrostatic field generated by a running light conveyor belt	EN ISO 21179	-
ISO 21183-1	-	Light conveyor belts - Part 1: Principal characteristics and applications	EN ISO 21183-1	-
ASTM D257	-	Standard Test Methods for DC Resistance or Conductance of Insulating Materials	-	-
ASTM D2624-07a	-	Standard Test Methods for Electrical Conductivity of Aviation and Distillate Fuels	-	-
ASTM D4308-95	-	Standard Test Method for Electrical Conductivity of Liquid Hydrocarbons by Precision Meter	-	-
ASTM E582-88	-	Standard test method for minimum ignition energy and quenching distance in gaseous mixtures	-	-
ASTM E2019-03	-	Standard test method for minimum ignition energy of a dust cloud in air	-	-
ASTM F150	-	Standard Test Method for Electrical Resistance of Conductive and Static Dissipative Resilient Flooring	-	-
ASTM F1971	-	Standard Test Method for Electrical Resistance of Tires Under Load On the Test Bench	-	-
BS 5958-1	-	Code of practice for control of undesirable static electricity - Part 1: General considerations	-	-
BS 5958-2	-	Code of practice for control of undesirable static electricity - Part 2: Recommendations for particular industrial situations	-	-
BS 7506-2	-	Methods for measurements in electrostatics -- Part 2 Test methods	--	-

<u>Publication</u>	<u>Year</u>	<u>Title</u>	<u>EN/HD</u>	<u>Year</u>
DIN 51412-1	-	Testing of petroleum products; determination - of the electrical conductivity - Part 1: laboratory method	-	-
DIN 51412-2	-	Testing of petroleum products; determination - of the electrical conductivity - Part 2: field method	-	-
	-	Resilient floor coverings - Determination of the electrical resistance	EN 1081	-
	-	Protective clothing - Electrostatic properties - Part 3: Test methods for measurement of charge decay	EN 1149-3	-
	-	Protective clothing - Electrostatic properties - Part 5: Material performance and design requirements	EN 1149-5	-
	-	Rubber and plastic hoses and hose assemblies for measured fuel dispensing systems - Specification	EN 1360	-
	-	Rubber hoses and hose assemblies for aviation fuel handling - Specification	EN 1361	-
	-	Non-electrical equipment for use in potentially explosive atmospheres - Part 1: Basic method and requirements	EN 13463-1	-
	-	Thermoplastic and flexible metal pipework for underground installation at petrol filling stations	EN 14125	-
	-	Conveyor belts for use in underground installations - Electrical and flammability safety requirements	EN 14973	-
ISGOTT	2006	International Safety Guide for Oil Tankers and Terminals (ISGOTT), fifth edition, International chamber of shipping, 2006	-	-
JNIOSH TR 42		Recommendations for Requirements for Avoiding Electrostatic Hazards in Industry	-	-
NFPA 77	-	Recommended practice on static electricity	-	-
SAE J1645	-	Surface vehicle recommended practice - Fuel systems and Components - Electrostatic Charge Mitigation	-	-

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CONTENTS

FOREWORD	11
INTRODUCTION	13
1 Scope	14
2 Normative references	14
3 Terms and definitions	17
4 Nomenclature	20
5 General	21
6 Static electricity in solid materials	22
6.1 General considerations	22
6.2 The use of conductive or dissipative materials in place of insulating ones	24
6.2.1 General considerations	24
6.2.2 Dissipative solid materials	24
6.2.3 Earthing of conductive and dissipative items	25
6.3 Precautions required when using insulating solid materials	26
6.3.1 General	26
6.3.2 Restrictions on the size of chargeable insulating surfaces	27
6.3.3 Earthed metal meshes	28
6.3.4 Insulating coatings on earthed conductive surfaces	28
6.3.5 Conductive or dissipative coatings on insulating materials	29
6.3.6 Static dissipative agents	30
6.3.7 Humidification	30
6.3.8 Ionisation / Charge Neutralisation	30
6.3.9 Methods to determine the incendivity of discharges	31
6.4 Conveyor belts and transmission belts	32
6.4.1 General	32
6.4.2 Conveyor belts	32
6.4.3 Transmission belts	33
7 Static electricity in liquids	34
7.1 General considerations	34
7.1.1 Occurrence of flammable atmospheres	34
7.1.2 Ignition sensitivity and limitations to the scope of advice	35
7.1.3 Charging mechanisms	36
7.1.4 Charge accumulation and conductivity classifications	36
7.1.5 Incendive discharges produced during liquid handling operations	37
7.2 Summary of precautions against ignition hazards during liquid handling operations	38
7.2.1 Earthing and avoidance of isolated conductors	38
7.2.2 Restricting charge generation	38
7.2.3 Avoidance of a flammable atmosphere	39
7.2.4 Promoting charge dissipation	39
7.3 Tanks and Containers	39
7.3.1 General	39
7.3.2 Conductive tanks and containers	40
7.3.3 Tanks and containers made entirely of dissipative material	53
7.3.4 Tanks and containers with insulating surfaces	53

7.3.5	Use of liners in containers	57
7.4	High viscosity liquids.....	58
7.5	High charging equipment	58
7.5.1	Filters, water separators and strainers	58
7.5.2	Pumps and other equipment	59
7.6	Gauging and sampling in tanks	60
7.6.1	General	60
7.6.2	Precautions during gauging and sampling.....	60
7.7	Pipes and hose assemblies for liquids.....	61
7.7.1	General	61
7.7.2	Pipes	61
7.7.3	Hoses and hose assemblies	64
7.8	Special filling procedures	70
7.8.1	Aircraft fuelling	70
7.8.2	Road tanker deliveries	71
7.8.3	Retail filling stations	72
7.8.4	Mobile or temporary liquid handling equipment	76
7.9	Plant processes (blending, stirring, mixing, crystallisation and stirred reactors)	76
7.9.1	General	76
7.9.2	Earthing	76
7.9.3	In-line blending	76
7.9.4	Blending in vessels or tanks	77
7.9.5	Jet mixing	77
7.9.6	High speed mixing	78
7.10	Spraying liquids and tank cleaning	78
7.10.1	General	78
7.10.2	Tank cleaning with low or medium pressure water jets (up to about 12 bar)	78
7.10.3	Tank cleaning with low conductivity liquids	79
7.10.4	Tank cleaning with high pressure water or solvent jets (above 12 bar).....	79
7.10.5	Steam cleaning tanks	79
7.10.6	Water deluge systems	80
7.11	Glass systems	80
7.11.1	General	80
7.11.2	Precautions to be taken for low conductivity liquids	80
8	Static electricity in gases	81
8.1	General.....	81
8.2	Grit blasting	81
8.3	Fire extinguishers	82
8.4	Inerting	82
8.5	Steam cleaning	82
8.6	Accidental leakage of compressed gas	82
8.7	Spraying of flammable paints and powders	83
8.7.1	General	83
8.7.2	Earthing.....	83
8.7.3	Plastic spray cabinets	83
8.8	Vacuum cleaners, fixed and mobile	83

8.8.1	General	83
8.8.2	Fixed systems.....	83
8.8.3	Portable systems	84
8.8.4	Vacuum trucks.....	84
9	Static electricity in powders	84
9.1	General.....	84
9.2	Discharges, occurrence and incendivity	85
9.3	Procedural measures	86
9.3.1	General	86
9.3.2	Humidification.....	86
9.3.3	Hoses for pneumatic transfer.....	86
9.3.4	Ionisation.....	86
9.4	Bulk materials in the absence of flammable gases and vapours	87
9.4.1	General	87
9.4.2	Equipment and objects made of conductive or dissipative materials.....	87
9.4.3	Equipment and objects made of insulating materials	87
9.4.4	Dust separators	88
9.4.5	Silos and Containers.....	88
9.5	Additional requirements for bulk material in the presence of flammable gases and vapours.....	94
9.5.1	General	94
9.5.2	Measures for resistivity greater equal 100 MΩ m	94
9.5.3	Measures for resistivity less than 100 MΩ m	94
9.5.4	Filling of bulk material into a container.....	95
9.6	Flexible intermediate bulk containers (FIBC).....	96
9.6.1	General	96
9.6.2	Additional precautions when using FIBC	98
10	Static electricity when handling explosives and electro-explosive devices.....	99
10.1	Explosives manufacture, handling and storage.....	99
10.1.1	General	99
10.1.2	First degree protection.....	99
10.1.3	Intermediate protection	99
10.1.4	Second degree protection	99
10.2	Handling of electro-explosive devices	100
10.2.1	General	100
10.2.2	Earthing.....	100
10.2.3	Precautions during storage and issue	101
10.2.4	Precautions during preparation for use	101
11	Static electricity on people.....	101
11.1	General considerations	101
11.2	Static dissipative floors	102
11.3	Dissipative and conductive footwear	102
11.4	Supplementary devices for earthing of people	103
11.5	Clothing	103
11.6	Gloves	105
11.7	Other Items.....	105
12	Electrostatic shock	105
12.1	Introduction.....	105

12.2	Discharges relevant to electrostatic shocks.....	106
12.3	Sources of electrostatic shock.....	106
12.4	Precautions to avoid electrostatic shocks.....	107
12.4.1	Sources of electrostatic shocks.....	107
12.4.2	Reported shocks from equipment or processes.....	107
12.4.3	Shocks as a result of people being charged.....	107
12.5	Precautions in special cases	108
12.5.1	Pneumatic conveying.....	108
12.5.2	Vacuum cleaners	108
12.5.3	Reels of charged film or sheet	108
12.5.4	Fire extinguishers	109
13	Earthing and bonding.....	109
13.1	General.....	109
13.2	Criteria for the dissipation of static electricity from a conductor	110
13.2.1	Basic considerations.....	110
13.2.2	Practical criteria.....	110
13.3	Earthing requirements in practical systems	112
13.3.1	All-metal systems	112
13.3.2	Metal plant with insulating parts.....	113
13.3.3	Insulating materials	114
13.3.4	Conductive and dissipative materials	115
13.3.5	Earthing via intrinsic safety circuits	115
13.3.6	Earthing of ships	115
13.4	The establishment and monitoring of earthing systems	115
13.4.1	Design https://standards.itelai.com/catalog/standards/sist/13/1/71a-196-46db-819c	115
13.4.2	Monitoring https://standards.itelai.com/catalog/standards/sist/13/1/78aa7/sist-tp-clc/tr-60079-32-1-2019	116
14	Special requirements for equipment according to IEC 60079-0	116
14.1	General.....	116
14.2	Electrostatic charges on external non-metallic materials	117
14.2.1	Applicability	117
14.2.2	Avoidance of a build-up of electrostatic charge on Group I or Group II electrical equipment	117
14.2.3	Avoidance of a build-up of electrostatic charge on equipment for Group III	120
14.3	Electrostatic charges on external conductive parts	120
Annex A (informative)	Fundamentals of static electricity	121
A.1	Electrostatic charging	121
A.1.1	Introduction	121
A.1.2	Contact charging	121
A.1.3	Contact charging of liquids	121
A.1.4	Charge generation on liquids flowing in pipes	122
A.1.5	Charge generation in filters.....	125
A.1.6	Charge generation during stirring and mixing of liquids	125
A.1.7	Settling potentials	125
A.1.8	Breakup of liquid jets	125
A.1.9	Contact charging of powders	125
A.1.10	Charging by induction	126
A.1.11	Charge transfer by conduction	126
A.1.12	Charging by corona discharge	126

A.2	Accumulation of electrostatic charge	126
A.2.1	General	126
A.2.2	Charge accumulation on liquids	127
A.2.3	Charge accumulation on powders	128
A.3	Electrostatic discharges	129
A.3.1	Introduction	129
A.3.2	Sparks	129
A.3.3	Corona	130
A.3.4	Brush discharges	130
A.3.5	Propagating brush discharges	131
A.3.6	Lightning like discharges	131
A.3.7	Cone discharges	132
A.4	Measurements for risk assessment	132
Annex B (informative)	Electrostatic discharges in specific situations	134
B.1	Incendive discharges involving insulating solid materials	134
B.1.1	General	134
B.1.2	Sparks from isolated conductors	134
B.1.3	Brush discharges from insulating solid materials	134
B.1.4	Propagating brush discharges from insulating solid materials	134
B.2	Incendive discharges produced during liquid handling	135
B.2.1	General	135
B.2.2	Calculated maximum safe flow velocities for filling medium-sized vertical axis storage tanks	135
B.3	Incendive discharges produced during powder handling and storage	137
B.3.1	General	137
B.3.2	Discharges from bulk powder	137
B.3.3	Discharges from powder clouds	137
B.3.4	Discharges involving insulating containers and people	137
B.3.5	The use of liners in powder processes	137
B.3.6	Spark discharges in powder processes	138
B.3.7	Brush discharges in powder processes	138
B.3.8	Corona discharges in powder processes	138
B.3.9	Propagating brush discharges in powder processes	138
Annex C (informative)	Flammability properties of substances	140
C.1	General	140
C.2	Effect of oxygen concentration and ambient conditions	140
C.3	Explosive limits for gases and liquids	140
C.4	Inerting	140
C.5	Flash point	141
C.6	Minimum ignition energies	141
C.7	Combustible powders	144
C.8	Biofuels	144
Annex D (informative)	Classification of hazardous areas	145
D.1	Concept of zoning	145
D.2	Classification	145
D.3	Explosion groups	145
D.3.1	General	145
D.3.2	Group I	145
D.3.3	Group II	146

D.3.4	Group III	146
Annex E (informative)	Classification of equipment protection level.....	147
Annex F (informative)	Flow chart for a systematic electrostatic evaluation	148
Annex G (informative)	Tests	150
G.1	General.....	150
G.2	Surface resistance	150
G.2.1	General	150
G.2.2	Principle	150
G.2.3	Apparatus	150
G.2.4	Test sample.....	151
G.2.5	Procedure.....	152
G.2.6	Acceptance criteria	152
G.2.7	Test report.....	152
G.3	Surface resistivity	152
G.4	Leakage resistance	153
G.4.1	General	153
G.4.2	Principle	153
G.4.3	Apparatus	153
G.4.4	Test sample.....	153
G.4.5	Procedure.....	154
G.4.6	Acceptance criteria	154
G.4.7	Test report.....	154
G.5	In-use testing of footwear.....	154
G.5.1	General SIST-TP CLC/TR 60079-32-1:2019	154
G.5.2	https://www.iteh.ai/catalog/standards/sist/131fl71a-19fc-46db-819e-4d8f12678aa7/sist-tp-clc-tr-60079-32-1-2019	154
G.5.3	Apparatus	154
G.5.4	Procedure.....	155
G.5.5	Acceptance criteria	155
G.5.6	Test report.....	155
G.6	In-use testing of gloves	155
G.6.1	General	155
G.6.2	Principle	155
G.6.3	Apparatus	156
G.6.4	Procedure.....	156
G.6.5	Acceptance criteria	156
G.6.6	Test report.....	156
G.7	Powder resistivity.....	156
G.7.1	General	156
G.7.2	Principle	156
G.7.3	Apparatus	157
G.7.4	Procedure.....	157
G.7.5	Acceptance criteria	158
G.7.6	Test report.....	158
G.8	Liquid conductivity	158
G.8.1	General	158
G.8.2	Principle	158
G.8.3	Apparatus	158
G.8.4	Procedure.....	159
G.8.5	Acceptance criteria	159

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