SLOVENSKI STANDARD
SIST HD 624.2 S1:1996

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Materials used in communication cables - Part 2: PVC sheating compounds

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Werkstoffe für Kommunikationskabel -- Teil 2: PVC-Mantelmischungen

Matériaux utilisés dans les câbles de communication -- Partie 2: Mélanges en PVC pour gainage

Ta slovenski standard je istoveten z: **HD 624.2 S1:1994**

ICS:

29.035.20	Plastični in gumeni izolacijski materiali	Plastics and rubber insulating materials

SIST HD 624.2 S1:1996 **en**

HARMONIZATION DOCUMENT HD 624.2 S1

DOCUMENT D'HARMONISATION

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Descriptors: Communication cables, sheathing compounds, PVC

ENGLISH VERSION

Materials used in communication cables
Part 2: PVC sheathing compounds

Matériaux utilisés dans les câbles de communication
Partie 2: Mélanges en PVC pour gainage

Werkstoffe für Kommunikationskabel
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This Harmonization Document was approved by CENELEC on 1993-12-08. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for implementation of this Harmonization Document on a national level.

Up-to-date lists and bibliographical references concerning national implementation may be obtained on application to the Central Secretariat or to any CENELEC member.

This Harmonization Document exists in three official versions (English, French, German).

CENELEC members are the national electrotechnical committees of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

CENELEC

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

Central Secretariat: rue de Stassart 35, B-1050 Brussels

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Foreword

This Harmonization Document was prepared by CENELEC Technical Committee TC 46X/WG 2, Communication cables.

Following a CLC/TC 46X decision during its meeting on 1992-07-08 and with the approval of the 73rd Technical Board, the text was submitted to the Unique Acceptance Procedure (UAP) in March 1993 and was approved by CENELEC as HD 624.2 S1 on 1993-12-08.

The following dates were fixed:

- latest date of announcement of the HD at national level (doa) 1994-06-01

- latest date of publication of a harmonized national standard (dop) 1994-12-01

- latest date of withdrawal of conflicting national standards (dow) 1994-12-01

For products which have complied with the relevant national standard before 1994-12-01, as shown by the manufacturer or by a certification body, this previous standard may continue to apply for production until 1999-12-01.

This document forms part of a series of standards on materials used in communication cables which will include the following parts:

Part 1: PVC insulation compounds
Part 2: PVC sheathing compounds
Part 3: PE insulation
- Table 1: Solid
- Table 2: Cellular (including foam-skin)

Part 4: PE sheathing
Part 5: Polypropylen insulation
Part 6: Flame retardant insulation compounds
Part 7: Halogen free flame retardant thermoplastic sheathing compounds
Part 8: Filling compounds for filled cables

The different parts include specific requirements for communication cables; common characteristics are aligned as far as possible on existing Harmonization Documents, if any, and in as far as these may apply to communication cables.

PVC sheathing compounds

	Characteristics	Test method	Unit	Grades	
				TM51	TM52
1	**Maximum rated temperature at cable for which the compound can be used**		°C	70	70
2	**Density**	HD 505.1.3 § 8	g/cm^3	to be recorded	
3	**Hardness**	ISO 868	Shore A	to be recorded	
4	**Mechanical characteristics**				
4.1	In state of delivery Tensile strength - median, min.	HD 505.1.1 § 9.2	MPa	12,5	10
	Elongation at break - median, min.		%	125	150
4.2	After ageing Ageing conditions - temperature - duration	HD 505.1.2 § 8.1	°C h	80 7 x 24	80 7 x 24
	Tensile strength - median, min. - variation, max.		MPa %	12,5 ± 20	10 ± 20
	Elongation at break - median, min. - variation, max.		% %	125 ± 20	150 ± 20
5	**Loss of mass** Test conditions - temperature - duration Result to be obtained, max.	HD 505.3.2 § 8.2	°C h mg/cm^2	80 ± 2 7 x 24 2,0	80 ± 2 7 x 24 2,0
6	**Heat shock test** Test conditions - temperature - duration Result to be obtained	HD 505.3.1 § 9.2	°C h	150 ± 2 1 no crack	150 ± 2 1 no crack
7	**Pressure test at high temperature** Test conditions - temperature - duration Result to be obtained - depth of indentation median, max.	HD 505.3.1 § 8.2	°C h %	80 ± 2 4 50	70 ± 2 4 50

PVC sheathing compounds

Characteristics		Test method	Unit	Grades	
				TM51	TM52
8	**Behaviour at low temperature**				
8.1	Bending test at low temperature - temperature Result to be obtained	HD 505.1.4 § 8.2	° C	– 15 ± 2 no crack	– 15 ± 2 no crack
8.2	Elongation test at low temperature - temperature Elongation, min.	HD 505.1.4 § 8.4	° C %	– 15 ± 2 20	– 15 ± 2 20
8.3	Impact test at low temperature (if required in the detail specification of the cable) - temperature Result to be obtained	HD 505.1.4 § 8.5	° C	– 15 ± 2 no crack	– 15 ± 2 no crack

General comment :

In case of specific application, additional performances (i.e chemical resistance, UV resistance, water absorption...) could be needed. Relevant test methods and requirements shall be included in the detail specification of the cable.