Environmental Product Declaration

In accordance with ISO 14025:2006 and EN 15804+A2:2022

PVC trunkings, Wall channel and partition walls

Manufacturer: KOPOS KOLÍN a.s.

Program: National environmental labeling program

Program Operator: Ministry of the Environment of the Czech Republic

Product Category Rules: EN 15804+A2:2022

EPD registration number: EPD-Sk08-25-10

EPD for a product group, based on the worst values of the impact category indicator results

Valid from: 2025-10-09

General information

Program: National environmental labeling program

Program Operator: Ministry of the Environment of the Czech Republic

Manufacturer: KOPOS KOLÍN a.s., Havlíčkova 432, Kolín 28002, Kolín IV, Czech Republic

EPD registration number: EPD-Sk08-25-10

Declared unit: 1 kg of PVC product covered by this EPD

Product Category Rules: EN 15804+A2:2022

Owner of the EPD: KOPOS KOLÍN a.s.

Contact: Bc. Ivana Fiedlerová, e-mail: ekolog@kopos.cz

Created by: Bc. Ivana Fiedlerová

Valid from: 2025-10-09

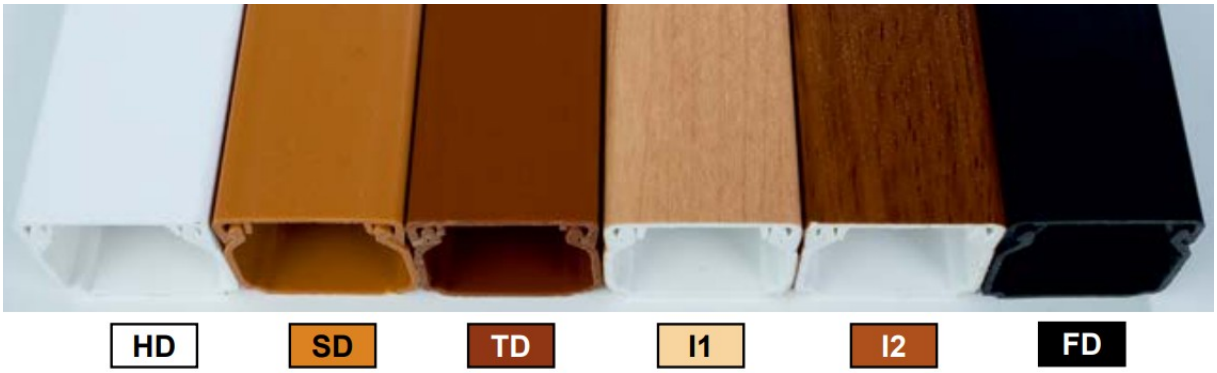
Validity: 5 years

Expiration date: 2030-10-08

The EPD owner has the sole ownership and responsibility for the EPD.

EPDs within a category are not necessarily comparable. For two EPDs to be comparable, they must be based on the same product category principle, cover products with the same functions, technical characteristics and use – the same declared unit must be used. They must have equivalent system boundaries, data quality requirements, data collection methods and allocation procedures.

PVC trunkings, Wall channel and partition walls



Company information

KOPOS KOLÍN a.s. is one of the traditional manufacturers of electrical installation materials in the Czech Republic, where it has been operating on the market for many years. We successfully continue the tradition of manufacturing wiring storage material in Kolín, which was started in 1926. Since 1962, the technical development of the plant has also dealt with the technology of processing plastic materials in connection with applications for wiring storage material. Thanks to modern technology, continuous product development is possible. In 2023, the construction of a PV plant was started, which was successfully completed in 2024.

Increasing market demands in the Czech Republic and abroad led the company to expand in Europe in 1997 and then overseas. Now KOPOS KOLÍN a.s. is part of the holding structure of KOPOS HOLDING, a.s.

The company has been ISO 9001 certified since 1997. In 2001, it was awarded the Safe Enterprise certificate and ISO 14001 certificate. In 2018, the company obtained ISO 50001 certification. All these certifications are verified and the certificates are renewed.

Product information

PVC trunkings, Wall channel are designed for small and low wiring installations. They are suitable for installing electrical wiring on base materials with fire reaction class A1 – F, whether on walls, ceilings, or floors.

PVC trunkings, Wall channel can be installed in areas with a risk of explosion of flammable gases and vapors in zone 2 and in areas with a risk of explosion of flammable dust in zone 22.

All electrical installation PVC trunkings, Wall channel are antibacterial – they do not support the growth of bacteria.

Technical information

PVC trunkings, Wall channel are are manufactured in several variants. The dimensions of the PVC trunkings, Wall channel are indicated in the product type name.

Color coding: F = black, H = white, K = light gray, L = dark gray, S = light wood, T = dark wood, I1 = pink birch, I2 = dark oak

Length and packaging type marking: A = 3 m in foil, C = 2 m in foil, D = 2 m in cardboard.

Tab. 1 – technical information about products

Item No.	Weight [kg/m]	Item Name
LH 15X10	0,078	SQUARE TRUNKING
LH 60X40	0,550	SQUARE TRUNKING
LHD 17X17	0,115	SQUARE TRUNKING
LHD 20X10	0,100	SQUARE TRUNKING
LHD 20X20	0,137	SQUARE TRUNKING
LHD 25X15	0,135	SQUARE TRUNKING
LHD 25X20	0,165	SQUARE TRUNKING
LHD 30X25	0,178	SQUARE TRUNKING
LHD 32X15	0,160	SQUARE TRUNKING
LHD 40X20	0,215	SQUARE TRUNKING
LHD 40X40	0,385	SQUARE TRUNKING
LHD 50X20	0,245	SQUARE TRUNKING
EKD 100X40	0,870	WIRING CHANNEL
EKD 120X40	1,040	WIRING CHANNEL
EKD 80X40	0,700	WIRING CHANNEL
EKE 100X60	1,100	WIRING CHANNEL
EKE 140X60	1,453	WIRING CHANNEL
EKE 180X60	1,910	WIRING CHANNEL
EKE 60X60	0,750	WIRING CHANNEL
PK 90X55 D	0,860	WIRING CHANNEL
PK 110X65 D	1,200	HOLLOW WALL TRUNKING
PK 120X55 D	1,248	HOLLOW WALL TRUNKING
LE 40	0,237	TRUNKING ELEGANT
LE 100	0,585	TRUNKING ELEGANT
LE 60	0,370	TRUNKING ELEGANT
LE 80	0,460	TRUNKING ELEGANT
LV 11X10	0,067	INSERT TRUNKING
LV 18X13	0,105	INSERT TRUNKING
LV 24X22	0,160	INSERT TRUNKING
LV 40X15	0,230	INSERT TRUNKING
LO 35	0,155	ROUND TRUNKING

LO 50	0,255	ROUND TRUNKING
LO 75	0,440	ROUND TRUNKING
LZ 15X12	0,078	SLIP-ON TRUNKING
LZK 15X12	0,078	ROUND SLIP-ON TRUNKING
LP 80X25	0,700	FLOOR TRUNKING
LPK 80X25	0,790	FLOOR CARPET TRUNKING
LHD 50X20/1	0,260	SQUARE TRUNKING WITH ONE PARTITION WALL
LHD 50X20/2	0,300	SQUARE TRUNKING WITH TWO PARTITION WALLS
L 40	0,260	PULL-OUT TRUNKING
PEKD 40	0,100	PARTITION WALL FOR EKD CHANNEL
PEKE 60	0,150	PARTITION WALL

Products are made in compliance with ČSN EN 50085-1ed.2:2006+A1:2014 a ČSN EN 50085-2-1:2007+A1:2012.

Temperature resistance of PVC trunkings and Wall channel: -5 °C to +60 °C

Tab. 2 – Information on composition

Item	Material	% representation	Biogenic carbon kg CO2 eq/kg
PVC trunkings, channels, and partitions	Primary PVC	80–90 %	1,19E-02
	Additives	10–20 %	

The products do not contain SVHC (Substances of very high concern) in excess of 0,1 % w/w according to the List of SVHC available at the date of issue of the EPD.

Tab. 3 – Information on packaging

Type of packaging	% representation	Biogenic carbon kg CO2 eq/kg
PE packaging	10	5,27E-02
cardboard	10	1,19E+00

LCA: Calculation rules

Declare unit

1 kg of product was used as the declared unit. Since the impacts of all products included do not meet the 10 % rule, the worst impacts in each category were used.

Reference service life

If products PVC trunkings, Wall channel and partition walls are installed correctly, they can have a service life more than 30 years.

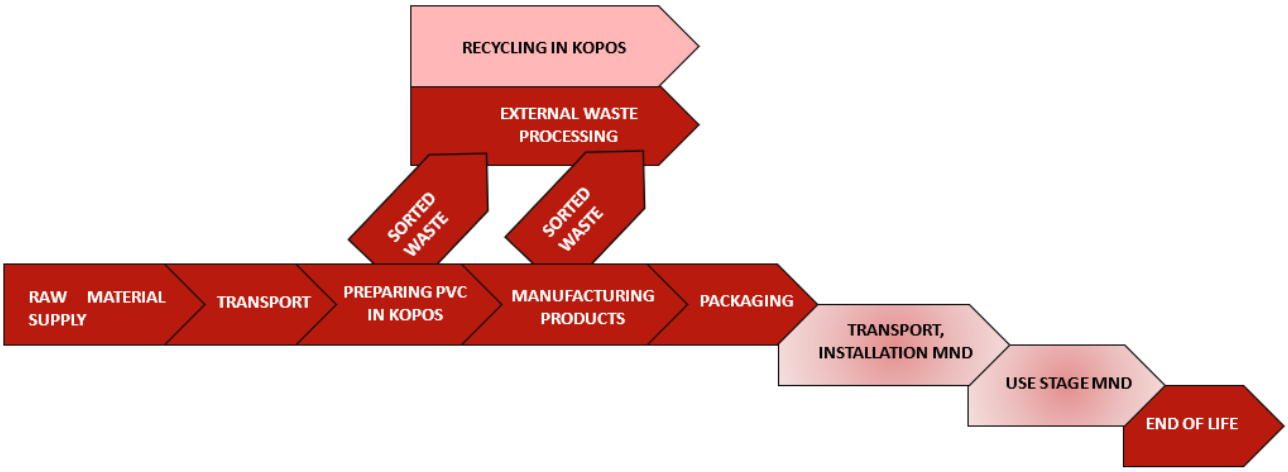
Product system and system boundaries

This EPD is a cradle-to-gate type with modules C1 - C4 and module D.

Tab. 4 – Declared modules

	Product stage			Construction processess stage		Use stage							End of life stage				Supplementary information beyond construction works life cycle
	Raw material supply	Transport	Manufacturing	Transport	Construction – installation porcesses	USe	Maintenuance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction, demolition	Transport	Waste processing	Disposal	Reuse, recovery, recycling potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	X	X	X										X	X	X	X	X
Geography	RER	RER	CZ										RER	RER	RER	RER	RER
Variation - products	26 %			ND	ND	ND	ND	ND	ND	ND	ND	ND	-	-	-	-	-
Variation - sites	0 %												-	-	-	-	-
Share of specific data	75 %												-	-	-	-	-

ND – not declarated



Picture No. 1 – Light parts indicate undeclared modules and processes outside the system boundaries

Raw material and its transport, A1 + A2

All these raw materials are sourced from the European market. The transport of raw materials varies depending on the quantity and the supplier.

Manufacturing A3

All products included in this EPD are made in KOPOS KOLÍN a.s., in Kolín, in the Czech Republic.

Production consists of preparing the material in the PVC mixing plant and then transporting it to the production line, where it is sucked in and melted. The melt is extruded through a mold, where it acquires the desired shape and dimensions. The product is then cooled with water, which fixes its profile. The product is then marked with a print, and in some cases, it is further supplemented with a protective film or double-sided tape. Finally, it is divided into the desired length. The required number of PVC strips, channels, or partitions are then packaged in a specific way (in foil, in cardboard, with or without spacers).

Waste treatment

At least 75% of the waste generated during production is recycled directly in the KOPOS KOLÍN a.s. production plant (grinding, regranulation, reuse).

Transport and installation, A4 – A5, ND

The products are transported worldwide, usually via a warehouse, which then handles distribution to customers. No additional waste is generated during installation in the time of construction, nor is there any significant environmental impact. These modules were not included in the LCA.

Use stage, module B, ND

PVC trunkings, Wall channel and partition walls are long-life products. However, due to the declared limits of the system, durability was not taken into account.

No maintenance is required during the use phase (except for routine cleaning of surfaces) and a complete replacement is assumed as a repair. This phase was not included in the LCA.

End of life stage, module C

Dismantling may occur in the event of reconstruction or demolition of the building. If we consider the most common use, then this is the use on the surface. In this case, the original product has to be removed and replace it with a new one. Apart from the replaced product, no other waste is generated.

Transport to the waste disposal facility was assumed to be 100 km.

A model of 25% recycling, 45% incineration and 30% landfilling was used for waste treatment, based on the report The circular economy for plastic A European Overview published by Plastic Europe AISBL in 2022. The proportions have been adjusted for self-adhesive sided tape, which is not easy to remove from the product.

Module D

The product is fully recyclable. The use of this property is modeled in module D as a possible benefit against the used model of 25% recycling, 45% incineration and 30% landfilling.

Preconditions and measures taken

Administrative processes were not included in the analysis. In addition, processes related to the production of production equipment. The packaging included is based on the smallest sales unit.

Exclusion rules

Flows smaller than 0.001 % were excluded from the model.

Data sources

Production data for 2023 available from the D365FO information system was used as the initial source of information, with additional information calculated from this. In addition, information from suppliers and also from the Ecoinvent database, version 3.11, was used. If there is a major change in 2024 that is permanent, these changes are included (PV installation).

Data quality

Geographical representativeness – data was used as known from suppliers and customers. For processing in the Czech Republic, data from the Czech Republic was used (e.g. Czech country energy mix) and for suppliers from Europe, European data was used (e.g. supplied materials). Everything is based on information that is known to us. Geographical representativeness is marked in Tab. 3 – Declared modules.

Temporal representativeness – the supply data used is for 2023. If there is a major change in 2024 that is permanent, these changes are included (PV installation). 9 z 13

Technological representativeness – information on the technology used has been taken from production data.

Allocation

The production of PVC trunkings, Wall channel and partition walls generates waste, which is largely processed in KOPOS KOLÍN a.s. and reused in further production. All inputs that come with the material (i.e. packaging) are allocated to PVC trunkings, Wall channel and partition walls and the subsequent recyclate remains unencumbered by these inputs. Returnable and non-returnable waste is based on production figures from 2023.

The GWP of electricity used in phase A3 includes the electricity needed to prepare the material in the mixing plant and the electricity needed to manufacture the final product.

If it is possible to manufacture a product on several machines, the average energy consumption is used. If an input is supplied by multiple suppliers, the values used for that input are the average of all those suppliers.

Variability of products

The products differ in diameter (and therefore weight), colour and length (and therefore packaging). Their impacts do not meet the 10% rule (according to ISO 21930:2018), so the worst values in each impact category are used as the results presented.

LCA: Results

Tab. 5 – Impact categories

Impact category	Unit	A1-A3	C1	C2	C3	C4	D
Acidification	mol H+ eq	1,11E-02	0,00E+00	4,64E-05	1,46E-04	8,12E-05	6,72E-05
Climate change	kg CO2 eq	2,90E+00	0,00E+00	1,10E-02	5,68E-01	3,75E-01	6,89E-02
Climate change – Biogenic	kg CO2 eq	3,54E-02	0,00E+00	3,80E-06	3,74E-01	3,38E-01	1,89E-02
Climate change – Fossil	kg CO2 eq	2,91E+00	0,00E+00	1,10E-02	1,95E-01	3,74E-02	3,05E-02
Climate change – Land use and LU change	kg CO2 eq	1,38E-03	0,00E+00	5,04E-06	1,07E-05	5,88E-06	1,95E-02
Eutrophication, marine	kg N eq	2,14E-03	0,00E+00	1,66E-05	2,68E-04	4,48E-04	2,76E-05
Eutrophication, freshwater	kg P eq	4,84E-04	0,00E+00	1,19E-06	2,98E-05	3,54E-05	2,19E-06
Eutrophication, terrestrial	mol N eq	2,10E-02	0,00E+00	1,81E-04	5,88E-04	2,39E-04	2,62E-04
Ozone depletion	kg CFC11 eq	9,61E-07	0,00E+00	5,78E-12	5,68E-11	7,95E-12	9,20E-12
Photochemical ozone formation	kg NMVOC eq	7,50E-03	0,00E+00	6,61E-05	2,29E-04	1,88E-04	9,86E-05
Ionising radiation *	kBq U-235 eq	5,27E-01	0,00E+00	1,37E-04	2,88E-04	2,27E-04	3,79E-04
Resource use, fossils **	MJ	6,51E+01	0,00E+00	1,93E-02	3,52E-02	1,87E-02	3,27E-02
Resource use, minerals and metals **	kg Sb eq	5,07E-06	0,00E+00	3,07E-08	3,11E-08	1,35E-08	4,44E-08
Ecotoxicity, freshwater **	CTUe	5,49E+01	0,00E+00	5,14E-02	5,58E+00	9,29E+00	2,32E-01
Human toxicity, cancer **	CTUh	7,90E-10	0,00E+00	1,79E-12	7,55E-11	8,79E-12	7,27E-12
Human toxicity, non-cancer **	CTUh	4,05E-08	0,00E+00	1,01E-10	2,41E-09	1,35E-09	2,83E-10
Land use **	Pt	1,84E+01	0,00E+00	1,57E-01	2,04E-01	2,94E-01	1,33E-01
Water use **	m3 depriv.	9,01E+00	0,00E+00	8,23E-04	-2,18E-02	-4,87E-02	2,74E-02

*** disclaimer 1:** This impact category deals mainly with the eventual impact of low dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure nor due to radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, from radon and from some construction materials is also not measured by this indicator.

**** disclaimer 2:** The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high or as there is limited experienced with the indicator.

Tab. 6 – GWP used energy in module A3

Global warming potential of used energy in module A3	Unit	A3
Climate change	kg CO2 eq/kWh	6,43E-01

Tab. 7 – Composition of electricity

Energy	Unit	A1 – A3	C1	C2	C3	C4	D
Renewable	MJ	7,59E+00	0,00E+00	2,20E-03	5,32E-03	3,36E-03	1,90E+00
Fossil	MJ	6,79E+01	0,00E+00	2,96E-02	5,37E-02	2,71E-02	4,63E-02
Nuclear	MJ	1,09E+01	0,00E+00	2,16E-03	4,51E-03	3,55E-03	6,31E-03
Other	MJ	2,79E-03	0,00E+00	7,62E-06	3,78E-05	1,56E-05	1,05E-05

Tab. 8 – Other environmental information

Waste	Unit	A1 – A3	C1	C2	C3	C4	D
Harazdous	kg	4,51E-01	0,00E+00	1,05E-06	3,05E-06	2,06E-06	1,26E-06
Non-hazardous	kg	2,01E-01	0,00E+00	1,33E-02	2,58E-01	4,91E-01	2,32E-02
Radioactive	kg	1,02E-04	0,00E+00	3,35E-08	7,07E-08	5,48E-08	9,49E-08

Tab. 9 – Parametres describing resource use

Resource use	Unit	A1 – A3	C1	C2	C3	C4	D
PERE	MJ	3,75E+00	0,00E+00	1,70E-03	3,94E-03	2,70E-03	1,90E+00
PERM	MJ	3,84E+00	0,00E+00	5,02E-04	1,38E-03	6,60E-04	1,01E-03
PERT	MJ	7,59E+00	0,00E+00	2,20E-03	5,32E-03	3,36E-03	1,90E+00
PENRE	MJ	7,88E+01	0,00E+00	3,18E-02	5,82E-02	3,06E-02	5,26E-02
PENRM	MJ	2,79E-03	0,00E+00	7,62E-06	3,78E-05	1,56E-05	1,05E-05
PENRT	MJ	7,88E+01	0,00E+00	3,18E-02	5,82E-02	3,06E-02	5,26E-02
SM	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m^3	9,01E+00	0,00E+00	8,23E-04	-2,18E-02	-4,87E-02	2,74E-02

PERE – Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM – Use of renewable primary energy resources used as raw materials; PERT – Total use of renewable primary energy resources; PENRE – Use of non renewable primary energy excluding non renewable primary energy resources used as raw materials; PENRM – Use od non renewable primary energy resources used as raw materials; PENRT – Total use of non renewable primary energy resources; SM – Use of secondary material; RSF – Use of renewable secondary fuels; NRSF – Use of non renewable secondary fuels; FW – Net use of fresh water

LCA: Interpretation

From the above-mentioned results of the environmental impacts, it can be seen that the most significant of the environmental impact of the assessed modules is in the production module, in phases A1-A3. Specifically, it is the use of fossil resources, where the most significant part makes PVC, which is used for production.

The LCIA results are relative and do not predict the ultimate impacts of each category, threshold exceedances, safety margins or risks.

Sources

Report The circular economy for plastic A European Overview , Plastic Europe AISBL, 2022

Ecoinvent, version 3.11

SimaPro LCA Package, Pré Consultants, the Netherlands, www.pre-sustainability.com, version 3

ČSN EN 15804+A2:2022 Sustainability of construction works – Environmental product declarations – Core rules for the product category

ČSN ISO 21930:2018 Sustainability in buildings and civil engineering works – Core rules for environmental product declarations of construction products and services

Catalogues, product documentation

EPD Verification

Independent verification of declarations and data in accordance with ISO 14025:2006			
Standard ČSN EN 15804+A2 developed by CEN serves as baseline PCR*.			
☐	Internal	☒	External
		Verifier:	
		prof. Ing. Vladimír Kočí, PhD, MBA www.lca.cz Approved individual verifier of The International EPD® System	
*PCR – Product Category Rules			