

ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH ISO 14025, ISO 14040 AND ISO 14044

SmartEPD-2026-144-0961-01

Stainless Steel Ties

PANDUIT™



Date of Issue:	Expiration:	Last updated:
Jun 25, 2026	Jun 25, 2031	Jun 25, 2026

Refer to the EPD Library at www.smartepd.com for the latest EPD listing information



General Information

Panduit

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Product Name:	Stainless Steel Ties
Functional Unit:	1 unit
Declaration Number:	SmartEPD-2026-144-0961-01
Date of Issue:	June 25, 2026
Expiration:	June 25, 2031
Last updated:	June 25, 2026
EPD Scope:	Cradle to grave A1 - A3, A4, A5, B1 - B7, C1 - C4, D
Market(s) of Applicability:	Global

General Organization Information

At Panduit, sustainability drives business practices. They are committed to providing the most cost-efficient and environmentally sound solutions available. Because sustainable business practices have always been at the core of what Panduit does, it is a natural progression for them to create award-winning solutions that put sustainable business at the foundation of other infrastructure, too.

Further information can be found at: <https://www.panduit.com/en/about/about-panduit/environmental-social-and-governance.html>

Limitations, Liability and Ownership

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025 and EN 15804+A2. EPDs rely on Life Cycle Assessment (LCA) to provide information on a number of environmental impacts of products over their life cycle. Exclusions: EPDs do not indicate that any environmental or social performance benchmarks are met, and there may be impacts that they do not encompass. LCAs do not typically address the site-specific environmental impacts of raw material extraction, nor are they meant to assess human health toxicity. EPDs can complement but cannot replace tools and certifications that are designed to address these impacts and/or set performance thresholds – e.g. Type 1 certifications, health assessments and declarations, environmental impact assessments, etc.

Accuracy of Results: EPDs regularly rely on estimations of impacts, and the level of accuracy in estimation of effect differs for any particular product line and reported impact. Comparability: EPDs are not comparative assertions and are either not comparable or have limited comparability when they cover different life cycle stages, are based on different product category rules or are missing relevant environmental impacts. EPDs from different programs may not be comparable.

Reference Standards

Standard(s): ISO 14025, ISO 14040 and ISO 14044

Core PCR:	PEP PCR Electrical, Electronic and HVAC-R Products v.4 Date of issue: September 06, 2021
Sub-category PCR:	PEP ecopassport® PROGRAM PSR Specific Rules for Cable Management Solutions (PSR-0003-ed2.1-EN-2023 12 08) v.2.1 Date of issue: December 08, 2023 Valid until: December 08, 2028
Sub-category PCR review panel:	 Contact Smart EPD for more information.
General Program Instructions:	 Smart EPD General Program Instructions v.2.0, March 2025

Verification Information

LCA Author/Creator:	 Olivia Jurewicz  Sustainable Solutions Corporation  olivia@sustainablesolutionscorporation.com	
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Verification:	Independent critical review of the LCA and data, according to ISO 14044 and ISO 14071:  Hugues Imbeault-Tétreault  hugues.i-tetreault@groupeageco.ca Independent external verification of EPD, according to ISO 14025 and reference PCR(s):  Hugues Imbeault-Tétreault  hugues.i-tetreault@groupeageco.ca	External External

Product Information

Functional Unit:	1 unit
Mass:	0.0365 kg
Reference Service Life:	20 Years
Product Specificity:	 Product Average  Product Specific

Product Description

Part Groupings: Stainless Steel Ties

Stainless steel ties are available in various sizes with different tensile strengths, used ideally for cable management applications where strength, durability and resistance to harsh environment is required.

The functional unit utilized for this study is to mount a cable or a tube at a point with a cable tie with a clamping capacity between Y mm (minimum) and C mm (maximum) for a service life of 20 years (1 unit), in accordance with the PSR.

This Panduit EPD includes the following products, along with their minimum and maximum clamping capacities.

Part Number	Part Description	Minimum Clamping Capacity (mm)	Maximum Clamping Capacity (mm)
MLT4S-CP	Tie	12.7	102
MLT4H-LP	Tie	12.7	102
MLT4S-CP316	Tie	12.7	102
MLT4H-LP316	Tie	12.7	102
MLT2S-CP316	Tie	12.7	51
MLTFC4H-LP316	Tie	12.7	102
MLT6H-LP316	Tie	12.7	152
MLT4SH-LP316	Tie	25.4	102
MLT6SH-LP316	Tie	25.4	152
MLT6S-CP316	Tie	12.7	152

Product Specifications

Product SKU(s):	MLT6SH-LP316 is the selected reference product for this EPD. See the Product Description category for all products covered within this EPD.
Product Classification Codes:	UNSPSC - 39121703

Table 1. Material Composition

Material/Component Category	Origin	% Mass
Stainless Steel 316	None	100

Packaging Material	Origin	kg Mass
Cardboard	None	1.63E-03
Paper	None	6.64E-05
Plastic Film	None	1.55E-04
Nylon Strapping	None	1.51E-04
Styrofoam	None	1.46E-04
Wood	None	3.04E-03

Hazardous Materials
No regulated hazardous or dangerous substances are included in this product.

EPD Data Specificity

Primary Data Year:2024

Manufacturing Specificity:

✗ Industry Average

✓ Manufacturer Average

✗ Facility Specific

Averaging:

This study allocated energy and fuel resources by mass (kg) per product, as the processing phases for producing these products are consistent except that as product mass increases, the production inputs similarly increase. Multiple plant locations produce these products. They produce a variety of products with differing impacts, so allocation at the product level was conducted based on total mass of production.

Table 2. System Boundary

Production	A1	Raw material supply	✓
	A2	Transport	✓
	A3	Manufacturing	✓
Construction	A4	Transport to site	✓
	A5	Assembly / Install	✓
Use	B1	Use	✓
	B2	Maintenance	✓
	B3	Repair	✓
	B4	Replacement	✓
	B5	Refurbishment	✓
	B6	Operational Energy Use	✓
	B7	Operational Water Use	✓
End of Life	C1	Deconstruction	✓
	C2	Transport	✓
	C3	Waste Processing	✓
	C4	Disposal	✓
Benefits & Loads Beyond System Boundary	D	Recycling, Reuse Recovery Potential	✓

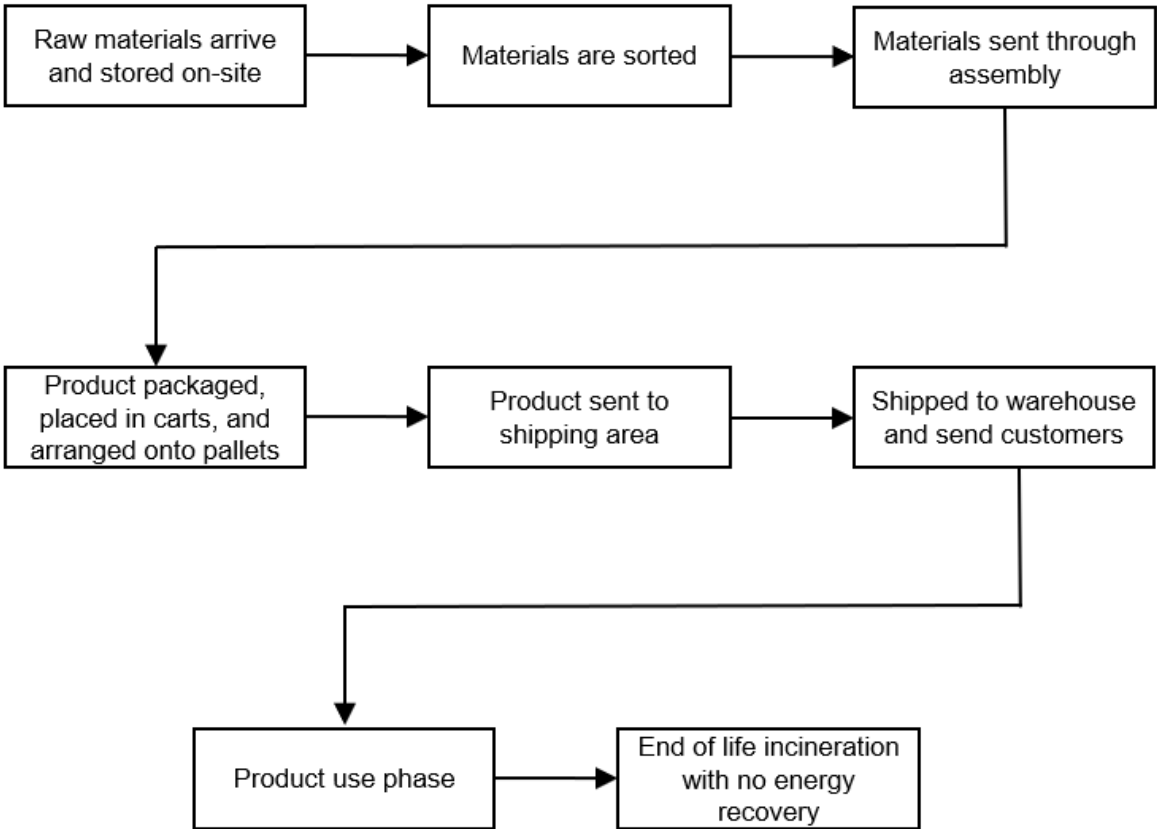
Note:
ND = Module not declared

Plants

-  North America North America
-  Asia Asia

Product Flow Diagram

Process Flow Diagram



Software And Database

LCA Software:  Sphera LCA for Experts (formerly GaBi) v. 10.9

LCI Foreground Database(s):

☒ Sphera Managed LCA Content (formerly GaBi Professional Database) v.

LCI Background Database(s):

☒ Sphera Managed LCA Content (formerly GaBi Professional Database) v. | ☒ US LCI v.

A foreground LCI database is the database used to model the primary, site-specific data collected for this EPD. A background LCI database is the database used to model generic or non-specific data.

Data Quality

Primary data were collected for every process in the product system under the control of Panduit's suppliers. Secondary data from the Sphera Managed LCA Content, US LCI, CPA and EUROFER databases were utilized when necessary. These data were evaluated and have temporal, geographic, and technical coverage appropriate to the scope of the product category.

The data sources used are complete and representative of global systems in terms of the geographic and technological coverage and are a recent vintage. The data used for primary data are based on direct information sources of the manufacturers and suppliers. Secondary data sets were used for raw materials extraction and processing, end of life, transportation, and energy production flows. Wherever secondary data is used, the study adopts critically reviewed data for consistency, precision, and reproducibility to limit uncertainty.

Life Cycle Module Description

For the manufacturing of cleats and straps products, raw materials are transported to the production facilities and stored on-site before entering the manufacturing process. Stainless steel materials are sorted and assembled per product specifications. Once the final product is assembled and ready for packaging, it is packaged, placed into carts, and arranged onto pallets for shipping. The final pallets and packages are sent to the shipping area and are shipped to a warehouse for distribution. Once in use, cable cleats and straps products require no maintenance, repair, or refurbishment during the reference service life. As the life cycle of this product is only 20 years, no additional replacements are required, per the PSR. Finally, the products are assumed 100% to incineration with no energy recovery at the end of life.

LCA Discussion

Allocation Procedure

The LCI data was collected from the Panduit facilities and suppliers for the 2024 calendar year. This study allocated energy and fuel resources by mass (kg) per product, as the processing phases for producing these products are consistent except that as product mass increases, the production inputs similarly increase. The Panduit facilities and suppliers produce a variety of products with differing impacts, so allocation at the product level was conducted based on total mass of production.. For secondary data, cut-off methodology was used.

Cut-off Procedure

Processes whose total contribution to the final result, with respect to their mass and in relation to all considered impact categories, is less than 1% can be neglected.

The sum of the neglected processes may not exceed 5% by mass of the considered impact categories. For that a documented assumption is admissible. For Hazardous Substances the following requirements apply:

- The Life Cycle Inventory (LCI) of hazardous substances must be included, if the inventory is available.
- If the LCI for a hazardous substance is not available, the substance must appear as an input in the LCI of the product, if its mass represents more than 0.1% of the product composition.

- If the LCI of a hazardous substance is approximated by modeling another substance, documentation must be provided.

This EPD is in compliance with the cut-off criteria. Capital items for the production processes (machine, buildings, etc.) were not taken into consideration.

Renewable Electricity

Energy Attribute Certificates (EACs) such as Renewable Energy Certificates (RECs) or Power Purchase Agreements (PPAs) are included in the baseline reported results: ✗ No

Scenarios

Transport to the building/construction site (A4)

A4 Module

Truck Transport: 3.65E+01 kgkm/pc

Installation in to the building/construction site (A5)

A5 Module

Installation Scrap Rate Assumed:	5 %
Product Lost per Declared/Functional Unit:	1.83E-03 kg
Waste Materials at the Construction Site Before Waste Processing:	7.01E-03 kg
Mass of Packaging Waste Specified by Type:	1.63E-03 kg cardboard; 6.64E-05 kg paper; 1.55E-04 kg plastic film; 1.51E-04 kg nylon strapping; 1.46E-04 kg styrofoam; 3.04E-03 kg wood kg
Biogenic Carbon Contained in Packaging (kg C):	2.09E-03 kg
Assumptions for scenario development:	The installation phase assumes a 5% scrap rate and 100 km of truck transportation for waste, in accordance with the PSR, and includes production, transportation and end of life scrap. All scrap is treated as 100% incineration with no energy recovery, per the PSR.

Use (B1)

B1 Module

Maintenance:

The study assumes the service life is 20 years, in accordance with the PSR. and there are no use (B1) phase assumptions for the products in this EPD.

Maintenance (B2)

B2 Module

Further assumptions for scenario development: There are no maintenance (B2) phase assumptions for the products in this EPD.

Repair (B3)

B3 Module

Further assumptions for scenario development: There are no repair (B3) phase assumptions for the products in this EPD.

Replacement (B4)

B4 Module

Further assumptions for scenario development: There are no replacement (B4) phase assumptions for the products in this EPD.

Refurbishment (B5)

B5 Module

Further assumptions for scenario development: There are no refurbishment (B5) phase assumptions for the products in this EPD.

Operational Energy Use (B6) & Operational Water Use (B7)

B6 & B7 Modules

Further assumptions for scenario development:
The use phase assumes that there are no energy (B6) use and no operational water (B7) phase scenarios for the products in this EPD.

End of Life (C1 - C4)

C1 - C4 Modules

Collection Process

Collected with Mixed Construction Waste: 8.37E-03 kg

Recovery

Incineration: 8.37E-03 kg

Assumptions for scenario development:
The end-of-life scenario was modeled based on an assumption of 100% incineration with no energy recovery and 100 km of truck transportation to final disposal.

Reuse, Recovery and / or Recycling Potentials & Relevant Scenario Information (D)

D Module

Recycling Rate of Product: 0 %

Recycled Content of Product: 0 %

Net Energy Benefit from Energy Recovery from 0 MJ

Waste Treatment Declared as Export Energy in

C3:

Net Energy Benefit from Thermal Energy Due to 0 MJ

Treatment of Waste Declared as Exported Energy

in C4:

Net Energy Benefit from Material Flow Declared in 0 MJ

C3 for Energy Recovery:

Further assumptions for scenario development: This study assumes the products are 100% sent to incineration with no energy recovery at the end-of-life. As a result, Module D is zero for all products.

Results

Table 3. Environmental Impact Assessment Results

TRACI 2.2, EF3.1

per 1 unit of product.

LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.

Impact Category	Unit	Method	A1 - A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
GWP-total (excl biogenic)	kg CO2 eq	TRACI 2.2	1.98e-1	3.82e-3	3.38e-3	0	0	0	0	0	0	0	0	3.82e-4	0	1.55e-2	0
GWP-total (incl biogenic)	kg CO2 eq	TRACI 2.2	1.91e-1	3.82e-3	1.10e-2	0	0	0	0	0	0	0	0	3.82e-4	0	1.55e-2	0
ODP	kg CFC 11 eq	TRACI 2.2	1.11e-10	7.88e-16	2.04e-13	0	0	0	0	0	0	0	0	7.88e-17	0	9.95e-15	0
AP	kg SO2 eq	TRACI 2.2	9.88e-4	2.60e-5	7.54e-6	0	0	0	0	0	0	0	0	2.60e-6	0	1.72e-5	0
EP-freshwater	kg P eq	TRACI 2.2	1.43e-7	4.86e-9	8.61e-10	0	0	0	0	0	0	0	0	4.86e-10	0	1.45e-9	0
EP-marine	kg N eq	TRACI 2.2	3.43e-4	2.39e-5	5.40e-6	0	0	0	0	0	0	0	0	2.39e-6	0	1.33e-5	0
POCP	kg O3 eq	TRACI 2.2	1.24e-2	5.83e-4	1.63e-4	0	0	0	0	0	0	0	0	5.83e-5	0	4.57e-4	0
HTP-c	CTUh	TRACI 2.2	9.55e-9	1.90e-14	1.75e-11	0	0	0	0	0	0	0	0	1.90e-15	0	2.33e-13	0
HTP-nc	CTUh	TRACI 2.2	4.76e-12	2.64e-13	3.67e-14	0	0	0	0	0	0	0	0	2.64e-14	0	6.08e-15	0
ETP-fw	CTUe	TRACI 2.2	6.79e-4	1.15e-3	1.22e-4	0	0	0	0	0	0	0	0	1.15e-4	0	2.20e-5	0
PM	kg PM2.5 eq	TRACI 2.2	1.16e-4	4.03e-7	3.38e-7	0	0	0	0	0	0	0	0	4.03e-8	0	6.13e-7	0
GWP- total	kg CO2 eq	EF3.1	1.93e-1	3.91e-3	1.11e-2	0	0	0	0	0	0	0	0	3.91e-4	0	1.55e-2	0
GWP- fossil	kg CO2 eq	EF3.1	2.00e-1	3.87e-3	3.39e-3	0	0	0	0	0	0	0	0	3.87e-4	0	1.55e-2	0
GWP-biogenic	kg CO2 eq	EF3.1	-7.66e-3	0	7.66e-3	ND	0	0	0	0	0	0	0	0	0	0	0
GWP-luluc	kg CO2 eq	EF3.1	3.36e-4	4.11e-5	5.19e-6	0	0	0	0	0	0	0	0	4.11e-6	0	1.82e-6	0
ODP	kg CFC11 eq	EF3.1	8.37e-11	6.63e-16	1.53e-13	0	0	0	0	0	0	0	0	6.63e-17	0	8.45e-15	0
AP	mol H+ eq	EF3.1	1.15e-3	2.82e-5	8.35e-6	0	0	0	0	0	0	0	0	2.82e-6	0	1.91e-5	0
PM	disease incidence	EF3.1	1.89e-8	1.19e-10	6.70e-11	0	0	0	0	0	0	0	0	1.19e-11	0	1.33e-10	0
IRP	kBq U235 eq	EF3.1	1.48e-2	1.39e-5	3.60e-5	0	0	0	0	0	0	0	0	1.39e-6	0	1.33e-4	0
POCP	kg NMVOC eq	EF3.1	5.97e-4	2.67e-5	7.19e-6	0	0	0	0	0	0	0	0	2.67e-6	0	1.92e-5	0
EP-fw	kg P eq	EF3.1	3.18e-7	1.08e-8	1.90e-9	0	0	0	0	0	0	0	0	1.08e-9	0	3.21e-9	0

Impact Category	Unit	Method	A1 - A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
EP-marine	kg N eq	EF3.1	2.01e-4	1.40e-5	3.10e-6	0	0	0	0	0	0	0	0	1.40e-6	0	7.39e-6	0
EP-terrestrial	mol N eq	EF3.1	2.18e-3	1.53e-4	3.56e-5	0	0	0	0	0	0	0	0	1.53e-5	0	9.29e-5	0
SQI	dimensionless	EF3.1	2.13e+0	2.26e-2	6.65e-3	0	0	0	0	0	0	0	0	2.26e-3	0	5.00e-3	0
WDP	m3 world eq deprived	EF3.1	1.22e-1	1.83e-5	8.42e-4	0	0	0	0	0	0	0	0	1.83e-6	0	5.72e-3	0
ADP-fossil	MJ, net calorific value	EF3.1	2.88e+0	5.12e-2	1.38e-2	0	0	0	0	0	0	0	0	5.12e-3	0	1.88e-2	0
ADP-minerals&metals	kg Sb eq	EF3.1	2.73e-6	2.66e-10	5.02e-9	0	0	0	0	0	0	0	0	2.66e-11	0	9.60e-11	0
ETP-fwio	CTUe	EF3.1	1.03e+0	6.66e-2	1.02e-2	0	0	0	0	0	0	0	0	6.66e-3	0	8.49e-3	0
HTP-cio	CTUh	EF3.1	1.18e-8	8.99e-13	2.19e-11	0	0	0	0	0	0	0	0	8.99e-14	0	7.61e-13	0
HTP-ncio	CTUh	EF3.1	2.10e-9	5.02e-11	3.95e-11	0	0	0	0	0	0	0	0	5.02e-12	0	1.04e-10	0

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

GWP = Global Warming Potential, 100 years (may also be denoted as GWP-total, GWP-fossil (fossil fuels), GWP-biogenic (biogenic sources), GWP-luluc (land use and land use change)), ODP = Ozone Depletion Potential, AP = Acidification Potential, EP = Eutrophication Potential, SFP = Smog Formation Potential, POCP = Photochemical oxidant creation potential, ADP-Fossil = Abiotic depletion potential for fossil resources, ADP-Minerals&Metals = Abiotic depletion potential for non-fossil resources, WDP = Water deprivation potential, PM = Particular Matter Emissions, IRP = Ionizing radiation, human health, ETP-fw = Eco-toxicity (freshwater), HTP-c = Human toxicity (cancer), HTP-nc = Human toxicity (non-cancer), SQP = Soil quality index.

Comparisons cannot be made between product-specific or industry average EPDs at the design stage of a project, before a building has been specified. Comparisons may be made between product-specific or industry average EPDs at the time of product purchase when product performance and specifications have been established and serve as a functional unit for comparison. Environmental impact results shall be converted to a functional unit basis before any comparison is attempted. Any comparison of EPDs shall be subject to the requirements of ISO 21930 or EN 15804. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries. EPDs are not comparative assertions and are either not comparable or have limited comparability when they have different system boundaries, are based on different product category rules or are missing relevant environmental impacts. Such comparison can be inaccurate, and could lead to erroneous selection of materials or products which are higher-impact, at least in some impact categories.

Table 4. Resource Use Indicator

per 1 unit of product.

Indicator	Unit	A1 - A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
PERE	MJ	6.03e-1	3.86e-3	1.81e-3	0	0	0	0	0	0	0	0	3.86e-4	0	4.66e-3	0
PERM	MJ	8.40e-2	0	8.40e-2	0	0	0	0	0	0	0	0	0	0	0	0
PERT	MJ	6.87e-1	3.86e-3	8.58e-2	0	0	0	0	0	0	0	0	3.86e-4	0	4.66e-3	0
PENRE	MJ	2.88e+0	5.12e-2	1.38e-2	0	0	0	0	0	0	0	0	5.12e-3	0	1.88e-2	0
PENRM	MJ	1.78e-2	0	1.78e-2	0	0	0	0	0	0	0	0	0	0	0	0
PENRT	MJ	2.89e+0	5.12e-2	3.16e-2	0	0	0	0	0	0	0	0	5.12e-3	0	1.88e-2	0
SM	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FW	m3	3.63e-3	1.91e-6	2.12e-5	0	0	0	0	0	0	0	0	1.91e-7	0	1.35e-4	0
RE	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

RPRE or PERE = Renewable primary resources used as energy carrier (fuel), RPRM or PERM = Renewable primary resources with energy content used as material, RPRT or PERT = Total use of renewable primary resources with energy content, NRPRE or PENRE = Non-renewable primary resources used as an energy carrier (fuel), NRPRM or PENRM = Non-renewable primary resources with energy content used as material, NRPRRT or PENRT = Total non-renewable primary resources with energy content, SM = Secondary materials, RSF = Renewable secondary fuels, NRSF = Non-renewable secondary fuels, RE = Recovered energy, ADPF = Abiotic depletion potential, FW = Use of net freshwater resources, VOCs = Volatile Organic Compounds.

Table 5. Waste and Output Flow Indicators

per 1 unit of product.

Indicator	Unit	A1 - A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
HWD	kg	1.06e-5	2.06e-12	1.93e-8	0	0	0	0	0	0	0	0	2.06e-13	0	9.35e-12	0
NHWD	kg	5.55e-3	7.15e-6	5.18e-3	0	0	0	0	0	0	0	0	7.15e-7	0	8.37e-3	0
RWD	kg	1.50e-4	9.67e-8	3.73e-7	0	0	0	0	0	0	0	0	9.67e-9	0	8.65e-7	0
HLRW	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ILLRW	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRU	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MFR	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EEE	MJ	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Note:

Not all abbreviated indicators listed below may be present in the results above. The inclusion of indicators varies based on PCR requirements.

Abbreviations:

HWD = Hazardous waste disposed, NHWD = Non-hazardous waste disposed, RWD = Radioactive waste disposed, HLRW = High-level radioactive waste, ILLRW = Intermediate- and low-level radioactive waste, CRU = Components for re-use, MFR or MR = Materials for recycling, MER = Materials for energy recovery, MNER = Materials for incineration, no energy recovery, EE or EEE = Recovered energy exported from the product system, EET = Exported thermal energy.

Table 6. Scaling Factors

Total A1-A3	MLT4S-CP	MLT4H-LP	MLT4S-CP316	MLT4H-LP316	MLT2S-CP316	MLTFC4H-LP316	MLT6H-LP316	MLT4SH-LP316	MLT6SH-LP316	MLT6S-CP316
Climate Change - total [kg CO2 eq.]	0.10	0.19	0.09	0.20	0.06	0.23	0.26	0.79	1.00	0.12
Climate Change, fossil [kg CO2 eq.]	0.10	0.19	0.09	0.20	0.06	0.23	0.26	0.79	1.00	0.12

Total A1-A3	MLT4S-CP	MLT4H-LP	MLT4S-CP316	MLT4H-LP316	MLT2S-CP316	MLTFC4H-LP316	MLT6H-LP316	MLT4SH-LP316	MLT6SH-LP316	MLT6S-CP316
Climate Change, biogenic [kg CO2 eq.]	0.07	0.16	0.06	0.20	0.04	0.23	0.23	0.79	1.00	0.06
Climate Change, land use and land use change [kg CO2 eq.]	0.11	0.20	0.11	0.20	0.07	0.21	0.27	0.79	1.00	0.14
Ozone depletion [kg CFC-11 eq.]	0.04	0.14	0.02	0.20	0.02	0.23	0.20	0.79	1.00	0.00
Acidification [Mole of H+ eq.]	0.11	0.20	0.10	0.20	0.07	0.21	0.27	0.79	1.00	0.14
Eutrophication, freshwater [kg P eq.]	0.09	0.18	0.09	0.20	0.06	0.23	0.25	0.79	1.00	0.11
Eutrophication, marine [kg N eq.]	0.11	0.20	0.11	0.20	0.07	0.22	0.27	0.79	1.00	0.14
Eutrophication, terrestrial [Mole of N eq.]	0.11	0.20	0.11	0.20	0.07	0.22	0.27	0.79	1.00	0.14
Photochemical ozone formation, human health [kg NMVOC eq.]	0.11	0.20	0.10	0.20	0.07	0.22	0.27	0.79	1.00	0.14
Resource use, mineral and metals [kg Sb eq.]	0.11	0.20	0.11	0.20	0.07	0.21	0.27	0.79	1.00	0.15
Resource use, fossils [MJ]	0.09	0.19	0.09	0.20	0.06	0.24	0.25	0.79	1.00	0.11
Water use [m³ world equiv.]	0.11	0.20	0.11	0.20	0.07	0.21	0.27	0.79	1.00	0.14

Total A1-A3	MLT4S-CP	MLT4H-LP	MLT4S-CP316	MLT4H-LP316	MLT2S-CP316	MLTFC4H-LP316	MLT6H-LP316	MLT4SH-LP316	MLT6SH-LP316	MLT6S-CP316
Particulate matter [Disease incidences]	0.11	0.20	0.11	0.20	0.07	0.21	0.27	0.79	1.00	0.14
Ionising radiation, human health [kBq U235 eq.]	0.08	0.17	0.07	0.20	0.05	0.22	0.24	0.79	1.00	0.08
Ecotoxicity, freshwater [CTUe]	0.10	0.19	0.09	0.20	0.06	0.24	0.26	0.79	1.00	0.12
Human toxicity, cancer [CTUh]	0.11	0.20	0.11	0.20	0.07	0.21	0.27	0.79	1.00	0.15
Human toxicity, non-cancer [CTUh]	0.10	0.20	0.10	0.20	0.07	0.22	0.27	0.79	1.00	0.13
Land Use [Pt]	0.08	0.17	0.07	0.20	0.05	0.22	0.24	0.79	1.00	0.09
Total A4-C4	MLT4S-CP	MLT4H-LP	MLT4S-CP316	MLT4H-LP316	MLT2S-CP316	MLTFC4H-LP316	MLT6H-LP316	MLT4SH-LP316	MLT6SH-LP316	MLT6S-CP316
Climate Change - total [kg CO2 eq.]	0.12	0.21	0.13	0.20	0.08	0.23	0.29	0.79	1.00	0.18
Climate Change, fossil [kg CO2 eq.]	0.14	0.23	0.15	0.20	0.09	0.23	0.31	0.78	1.00	0.22
Climate Change, biogenic [kg CO2 eq.]	0.10	0.20	0.10	0.20	0.07	0.23	0.27	0.79	1.00	0.13
Climate Change, land use and land use change [kg CO2 eq.]	0.11	0.20	0.11	0.20	0.07	0.23	0.27	0.79	1.00	0.14
Ozone depletion [kg CFC-11 eq.]	0.15	0.17	0.18	0.06	0.11	0.06	0.22	0.63	1.00	0.31

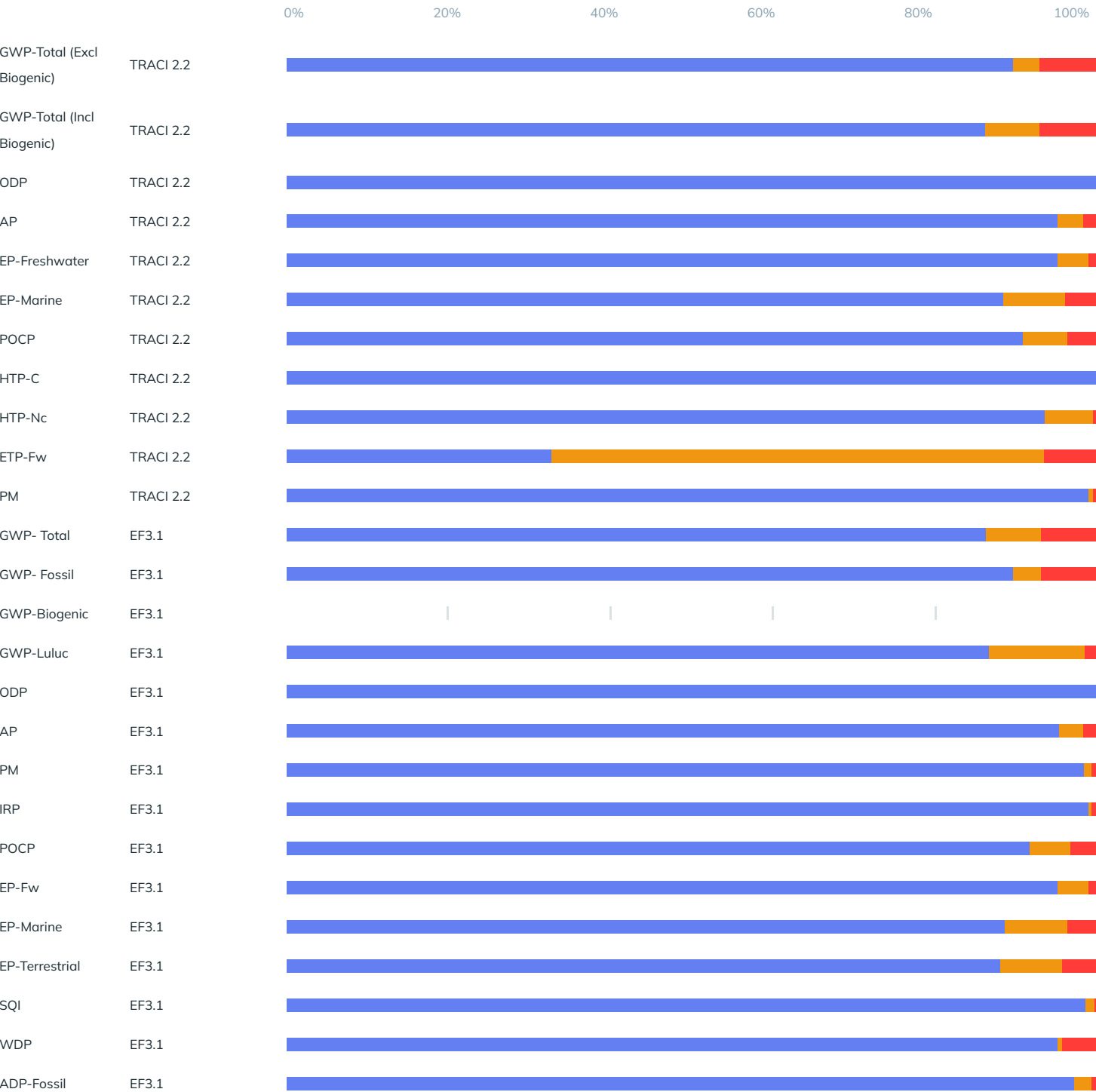
Total A1-A3	MLT4S-CP	MLT4H-LP	MLT4S-CP316	MLT4H-LP316	MLT2S-CP316	MLTFC4H-LP316	MLT6H-LP316	MLT4SH-LP316	MLT6SH-LP316	MLT6S-CP316
Acidification [Mole of H+ eq.]	0.45	0.51	0.53	0.21	0.33	0.22	0.63	0.78	1.00	0.86
Eutrophication, freshwater [kg P eq.]	0.12	0.21	0.12	0.20	0.08	0.22	0.28	0.78	1.00	0.17
Eutrophication, marine [kg N eq.]	0.43	0.49	0.51	0.22	0.31	0.23	0.61	0.79	1.00	0.82
Eutrophication, terrestrial [Mole of N eq.]	0.41	0.48	0.49	0.22	0.30	0.23	0.60	0.78	1.00	0.79
Photochemical ozone formation, human health [kg NMVOC eq.]	0.51	0.57	0.61	0.22	0.37	0.23	0.70	0.78	1.00	1.00
Resource use, mineral and metals [kg Sb eq.]	0.02	0.05	0.02	0.05	0.01	0.06	0.09	0.63	1.00	0.03
Resource use, fossils [MJ]	0.23	0.31	0.26	0.20	0.16	0.22	0.39	0.78	1.00	0.40
Water use [m³ world equiv.]	0.10	0.19	0.10	0.20	0.07	0.22	0.26	0.78	1.00	0.13
Particulate matter [Disease incidences]	0.29	0.36	0.34	0.19	0.21	0.21	0.46	0.77	1.00	0.54
Ionising radiation, human health [kBq U235 eq.]	0.09	0.18	0.09	0.18	0.06	0.20	0.24	0.76	1.00	0.12

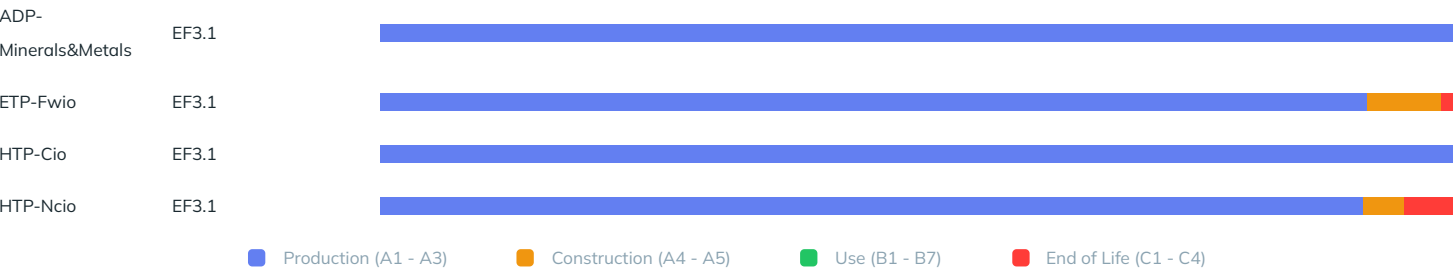
Total A1-A3	MLT4S-CP	MLT4H-LP	MLT4S-CP316	MLT4H-LP316	MLT2S-CP316	MLTFC4H-LP316	MLT6H-LP316	MLT4SH-LP316	MLT6SH-LP316	MLT6S-CP316
Ecotoxicity, freshwater [CTUe]	0.28	0.36	0.33	0.21	0.20	0.23	0.46	0.78	1.00	0.52
Human toxicity, cancer [CTUh]	0.03	0.06	0.03	0.06	0.02	0.06	0.10	0.64	1.00	0.05
Human toxicity, non-cancer [CTUh]	0.18	0.27	0.20	0.20	0.13	0.23	0.35	0.79	1.00	0.30
Land Use [Pt]	0.10	0.18	0.10	0.18	0.06	0.21	0.25	0.77	1.00	0.13

An impact assessment was completed for the reference product and the impacts were reported as representation of the group. The rest of the products in this EPD are represented through scaling factors and can be independently calculated, for impacts in accordance with EN15804+A2 (EF 3.1).

Interpretation

When evaluating the impact categories, the production (A1-A3) stage has the greatest contribution to environmental impacts across most impact categories, emphasizing that material efficiency and energy use reduction strategies are where primary improvement strategies can be applied.





Additional Environmental Information

At Panduit, we understand that what we deliver matters: high-quality infrastructure and connectivity solutions. But it's how we deliver them that defines who we are. We remain deeply aware of our environmental responsibilities, the importance of an inclusive workplace, and the value of transparent, ethical governance. These principles guide every decision we make and shape how we serve our customers, our people, and our partners.

As we've grown, so has our commitment—to not only deliver dependable, scalable network connectivity and powerful infrastructure, but also to embed sustainability into everything we do. By integrating environmental, social, and governance principles into our operations, we're creating smarter solutions that reduce packaging waste, move products more efficiently, and support a more responsible customer journey. Today's successes are the springboard for what comes next - anticipating tomorrow's challenges so we can build a future that is more connected, resilient, and sustainable."

- Fire: This product has no negative extraordinary environmental effects resulting from exposure to fire.
- Water: This product has no negative extraordinary environmental effects resulting from exposure to water.
- Mechanical Destruction: This product has no negative extraordinary environmental effects resulting from exposure to mechanical destruction.

References

Panduit Cleats and Straps Life Cycle Assessment. (May 2026). Sustainable Solutions Corporation.

Product Category Rule (PCR) PEP ecopassport Program: Product Category Rules for Electrical, Electronic and HVAC-R Products, v4.0, 2021 (PCR Part A)

PEP ecopassport Program: Product Specific Rules for Cable Management Solutions, v2.1, 2023 (PSR Part B)

Sphera LCA for Experts v10.9.1.17

ISO 14020:2022, Environmental labels and declarations — General principles

ISO 14025:2006, Environmental labels and declarations — Type III environmental declarations — Principles and procedures.

ISO 14040:2006, Environmental management — Life cycle assessment — Principles and framework.

ISO 14044:2006, Environmental management — Life cycle assessment — Requirements and guidelines.

EN 15804+A2:2019: Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction product

Smart EPD General Program Instructions v.2.0, March 2025