

ENVIRONMENTAL PRODUCT DECLARATION (EPD)

CommScope® - TENIO™ Closure Product



At CommScope, we believe that corporate responsibility and sustainability means making decisions that have a positive impact on our people, planet and bottom line.

CommScope's leaders have adopted a philosophy on corporate responsibility that embraces our core company values and holds us accountable to produce smart solutions that respect our people and our planet:

Meaningful integrity is a decisive personal and company-wide commitment to enable faster, smarter and more sustainable solutions while demonstrating the utmost respect for our human and natural resources.

This philosophy finds form in three pillars:

- Environmental
- Social
- Governance

Our commitment enables us to invest wisely in our future. By utilizing innovative technology, intelligent engineering and energy-efficient designs, we're building sustainable networks that make our customers more agile while also preserving the natural ecosystems from which we source our raw materials.



Environmental Product Declaration (EPD)

CommScope® Product
TENIO™ Closure



According to
ISO 14025,
EN 15804 + A2

This declaration is an environmental product declaration (EPD) in accordance with ISO 14025, 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.

EPD PROGRAM AND PROGRAM OPERATOR NAME, ADDRESS, LOGO, AND WEBSITE	ASTM International, 100 barr harbor drive west conshohocken, PA 19428
GENERAL PROGRAM INSTRUCTIONS AND VERSION NUMBER	General Program Instructions. Version 8.0. April 29, 2020
MANUFACTURER NAME AND ADDRESS	CommScope, Inc. 3642 E US Highway 70, Claremont, North Carolina 28610
DECLARATION NUMBER	EPD1208
DECLARED PRODUCT & FUNCTIONAL UNIT OR DECLARED UNIT	CommScope TENIO™ - Fiber Optic Splice Closure Functional Unit = One piece of assembled Closure for a reference lifetime of 25 years
REFERENCE PCR AND VERSION NUMBER	PEP ecopassport Program: Part A PCR for Electrical, Electronic and HVAC-R Products and Part B PSR Specific Rules for Wire Cables and Accessories
DESCRIPTION OF PRODUCT APPLICATION/USE	Part of CommScope's next-generation modular FTTX ecosystem, designed for last-mile drop applications in broadband networks.
PRODUCT RSL DESCRIPTION (IF APPL.)	25 Years
MARKETS OF APPLICABILITY	Europe
DATE OF ISSUE	15 June 2026
PERIOD OF VALIDITY	5 Years
EPD TYPE	Product Specific
RANGE OF DATASET VARIABILITY	N/A
EPD SCOPE	Cradle-to-Grave
YEAR(S) OF REPORTED PRIMARY DATA	2025
LCA SOFTWARE DATABASE(S) & VERSION NUMBER	SimaPro 10.2.0.0 & ecoinvent 3.11
LCIA METHODOLOGY & VERSION NUMBER	CML- IA Baseline 3.11, TRACI 2.2 and EN15804+A2 (adapted) 1.03
The sub-category PCR review was conducted by:	
This declaration was independently verified in accordance with ISO 14025: 2006. The "PEP ecopassport Program PCR for electrical, electronic and HVAC-R products", v4.0, 2021 based on EN 15804:2012 + A2:2019, serves as the core PCR. <input type="checkbox"/> INTERNAL <input checked="" type="checkbox"/> EXTERNAL	Timothy S Brooke ASTM International
This life cycle assessment was conducted in accordance with ISO 14044 and the reference PCR by:	
This life cycle assessment was independently verified in accordance with ISO 14044 and reference PCR by:	Thomas P. Gloria, Ph. D. Industrial Ecology Consultants

Environmental declarations from different programs (ISO 14025) may not be comparable. Comparison of the environmental performance using EPD information shall consider all relevant information modules over the full life cycle of the products within the building. This PCR allows EPD comparability only when the same functional requirements between products are ensured and the requirements of EN 15804:2012+A2:2019 are met. It should be noted that different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared.

General Information

Description of Company/Organization

CommScope (NASDAQ: COMM) helps design, build and manage wired and wireless networks around the world. Corporate responsibility and sustainability drive us to make decisions that benefit people, society, the planet and our bottom line. We enable faster, smarter and more sustainable solutions while respecting human and natural resources. Innovative technology, intelligent engineering and energy-efficient design help us meet our goals. CommScope builds sustainable networks that make our customers more agile, simultaneously helping to preserve the natural ecosystems from which we source components and materials.

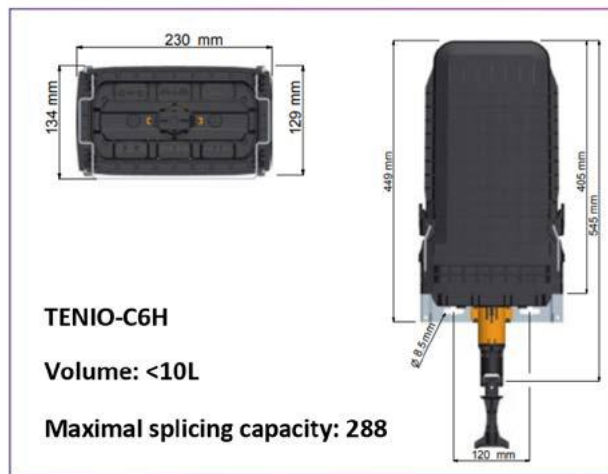
Product Description

The TENIO Optical Fiber Splice Closure is designed for fiber distribution and access network applications in FTTH broadband infrastructures. It supports fiber splicing in the distribution segment of the optical network and is suitable for residential, enterprise, and outdoor deployments. Its modular design allows flexibility for network installation, expansion, and maintenance as deployment requirements evolve. The closure incorporates a mechanical and gel-based sealing system to provide reliable environmental protection under demanding field conditions.

Product Type: Single-ended, rectangular fiber closure

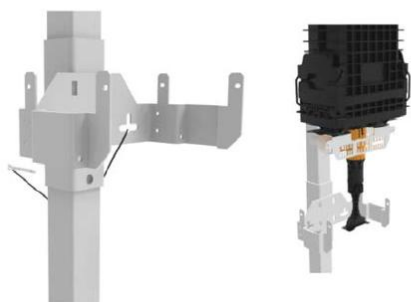
Product Characteristics: TENIO closures feature modular building blocks and combine proven fiber management hardware with a new sealing system to simplify training and reduce inventory. The closure’s 100-percent mechanical, tool-less and intuitive design facilitates lower-skilled network deployments. Full modularity of the closure platform supports a phased CAPEX network deployment scheme, reducing up-front CAPEX investment. CommScope’s superior gel-sealing technology guarantees sealing for most commonly available cable types. Designed for use with various cable constructions (loose buffer tube and microsheat), the closures deploy in any environment (aerial, pedestal, handhole, manhole).

This EPD covers the following TENIO Closure product variants and Accessories:



760250714 | TENIO-MOBRA-TUBE-45x45

CW6449-000 | TENIO-EXT/CF
(optional, to keep small cables straight)

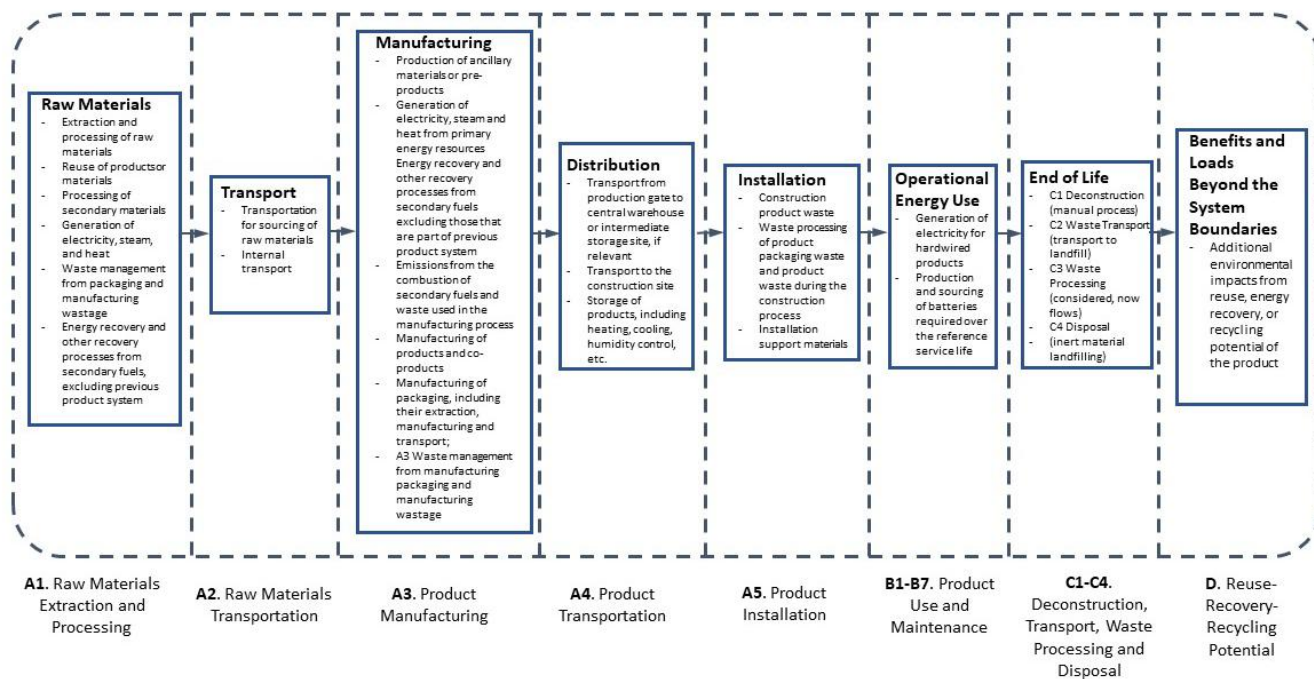


Mounting Bracket



Cable Fixation

Flow Diagram



Manufacturer Specific EPD

This product-specific EPD was developed based on the cradle-to-grave (modules A1-D) Life Cycle Assessment. The EPD accounts for raw material extraction and processing, transport, product manufacturing, distribution, installation, disposal. An impact assessment was completed for all closure product variants and accessories; the results for each product variant is shown in the results section.

Application

The TENIO closure is designed for the last mile drop applications and suited for new builds, expansions, and upgrades in residential, enterprise, or venue-based broadband networks.

Material Composition

The primary product and packaging materials are shown below as mass percentages, representing the composition of the product in its delivered state. The composition of the reference TENIO Closure is as follows:

	Raw materials- Mass percentage	TENIO- B6 Closure	TENIO- C6H Closure	MOBRA Bracket	Cable Fixation
Product Materials	PP+GF30	37%	39%	-	-
	PC+ABS	6%	6%	-	-
	PA6+GF30	12%	11%	-	-
	PP	2%	2%	-	-
	PC	0.3%	0.3%	-	-
	TPE gel	1%	1%	-	-
	Silicone rubber	1%	1%	-	-
	POM Copolymer	1%	1%	-	-
	Stainless steel	4%	3%	3%	6%
	Steel	14%	17%	76%	84%
Packaging Materials	Cardboard	14%	12%	17%	6%
	Wooden pallet	9%	8%	4%	2%

Technical Details

For the declared product of TENIO Closure, the following technical data in the delivery status must be provided with reference to the test standard:

Technical Data	
General Specifications	
Product Type	Single-ended, rectangular fiber closure
Product Series	TENIO
Cable Ports Quantity	6 multi-out ports (30 cables)
Cable Sealing Type	Compressed gel
Closure Sealing Type	Side latch
Closure Style	Single-ended
Colors	Black
Mounting types	Wall/flat surface
Network Area Type	Distribution and Drop applications
Splicing Type, Supported	Single fusion
Splicing capacity, maximum	288 (12 x 24 fibers)
Dimensions	B6-230x134x389mm; C6H- 230x134x449mm (HxWxL)
Product weights	B6- 4.2kg & C6H- 4.5kg
Material Specifications	
Material Type	Impact-resistant polymer

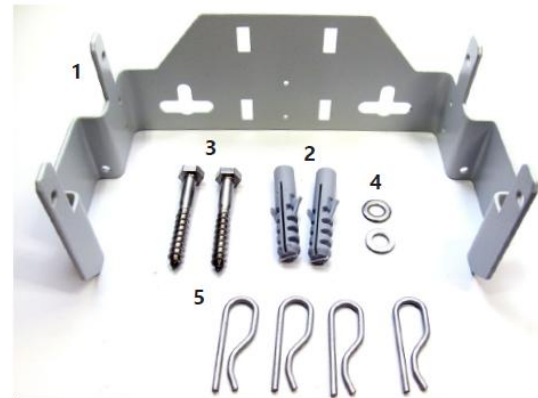
Environmental Specifications	
Environmental Space	Below ground/ Buried
Water resistance qualification	IEC 61300 with 2m water head
Sealing compliance	prEN 50411-2-10 (20 kPa and 2m water head)
Regulatory Compliance	
Quality Management	ISO 9001:2015
Compliance	RoHS compliant per 2011/65/EU, REACH-SVHC Compliant

Properties of Declared Product as Shipped

TENIO closures are supplied as a complete unit of enclosure consisting of the dome and base, including two side gel segments and orange tubing. Splice trays, cable gel sealing elements, and cable termination units (CTUs) are not included and must be ordered separately by the customer. Additional accessories are also ordered separately; however, they are included within the system definition for this EPD for reference purposes.



N°	Description	Qty
1	Closure assembly with Cover and Base	1
2	Side Gel sealing segments	2
3	Orange Tubing	3



	Description
1	Mounting bracket
2	Plugs
3	Screws (M8-hexagon head)
4	Washers
5	Split pins



	Description
1	External cable fixation bracket
2	Foam tape
3	Cable ties
4	Screws (Phillips head)

Methodological Framework

Functional Unit

The declaration refers to the functional unit of one assembled piece of TENIO Closure and Accessory.

	Name	Value	Unit
	Functional Unit	1	Assembled piece
B6- Closure	Mass	4.2	kg
C6H- Closure		4.5	
Mounting Bracket		1.3	
Cable Fixation		0.4	

System Boundary

This is a cradle to grave Environmental Product Declaration. The following life cycle phases were considered:

Life Cycle Stage	Life Cycle Module	Module	X = Included/ Not Included
Product Stage	Raw Material Supply & Parts manufacturing	A1	X
	Transport	A2	X
	Assembly process	A3	X
Construction Process Stage	Transport from gate to the site	A4	X
	Installation process	A5	X
Use Stage	Use	B1	X
	Maintenance	B2	X
	Repair	B3	X
	Replacement	B4	X
	Refurbishment	B5	X
	Operational energy use	B6	X
	Operational water use	B7	X
End of Life Stage	Deconstruction/ demolition	C1	X
	Transport	C2	X
	Waste processing	C3	X
	Disposal	C4	X
Benefits and Loads Beyond the System Boundaries	Reuse-Recovery-Recycling potential	D	X

Notes:

- There are no activities in the Modules B1-B7 and C1 as the values are “0”
- Module D is reported but excluded from the total life cycle results as it falls outside the system boundary

Reference Service Life

The reference service life of the closure is 25 years.

Allocation

Allocation was determined on a per piece basis for the system.

Cut-off Criteria

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 this, a documented assumption is permissible.

For Hazardous Substances the following requirements apply:

- The Life Cycle Inventory (LCI) of hazardous substances will be included, if the inventory is available.
- If the LCI for a hazardous substance is not available, the substance will 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 will be provided.

This EPD is in compliance with the cut-off criteria. No processes were neglected or excluded. Capital items for the production processes (machine, buildings, etc.) were not taken into consideration.

Data Sources

Primary data were collected for every process in the product system under the control of CommScope. Secondary data from the ecoinvent 3.11 database were utilized when necessary. These data were evaluated and have temporal, geographic, and technical coverage appropriate to the scope of the product category.

Data Quality

The data sources used are complete and representative of global systems in terms of the geographic and technological coverage and are a recent vintage (i.e. less than ten years old). Primary data are based on direct information from manufacturers. 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.

Period Under Review

The period under review is the full calendar year of 2025.

Treatment of Biogenic Carbon

The uptake and release of biogenic carbon throughout the product life cycle follows EN15804+A2 Section 6.4.4.

Comparability and Benchmarking

A comparison or an evaluation of EPD data is only possible if all data sets to be compared were created according to EN 15804 + A2 and the building context, respectively the product-specific characteristics of performance, are taken into account. Environmental declarations from different programs may not be comparable. Full conformance with the PCR allows for EPD comparability only when all stages a product's life cycle have been considered. However, variations and deviations are possible.

Units

The LCA results within this EPD are reported in SI units.

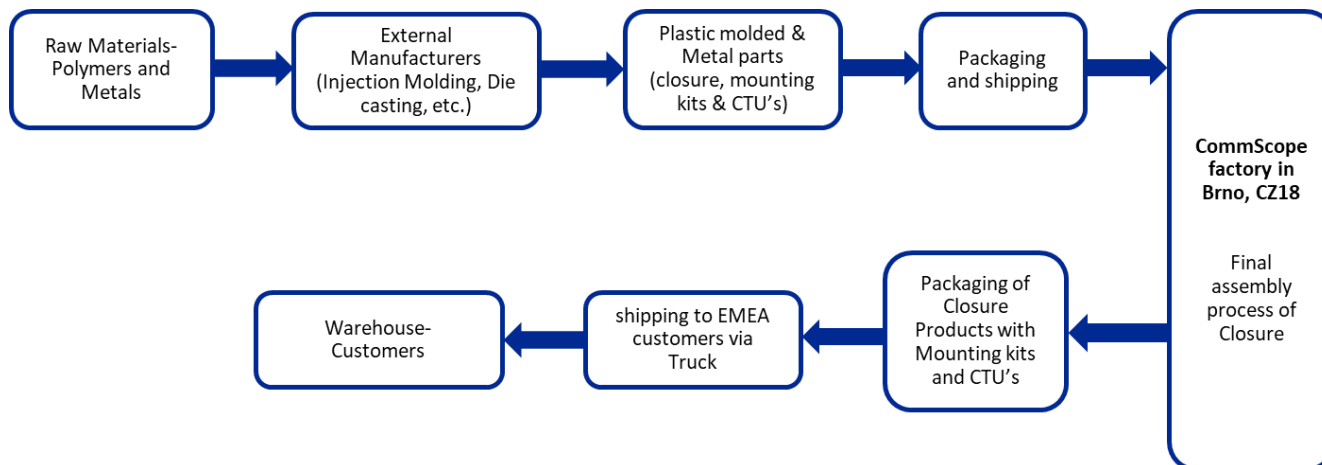
Additional Environmental Information

Background Data

For life cycle modeling of the considered products, SimaPro- LCA software tool, developed by PRé-Sustainability, is used. The ecoinvent database contains consistent and documented datasets which are available online. To ensure comparability of results in the LCA, data from the ecoinvent database were used for materials, energy, transportation, and waste treatment.

Manufacturing

The manufacturing process of the TENIO closure begins with the sourcing of raw materials, primarily polymers and metals, which are processed by external suppliers using injection molding, die casting, and related manufacturing techniques to produce individual plastic and metal components. These components are packaged and transported to the CommScope manufacturing facility in Brno, Czech Republic, where final assembly takes place. Assembly consists of integrating molded enclosure parts with mechanical latching and sealing elements using a fully mechanical, tool-less design, without the use of adhesives or heat-shrink processes. Following assembly, the closures undergo inspection and functional verification before being packaged for distribution. The finished products are then shipped to customer warehouses. The modular design allows trays, gel sealing systems, and other functional accessories to be manufactured and supplied separately, reducing complexity during base product manufacturing and enabling flexible configuration at deployment.



Transformation

Transport to Installation Site (A4)		
Description	Value	Unit
Transport type	Truck/ lorry > 32 metric ton	
Fuel type/ Liters of Fuel	Diesel, compliant with EURO5	
Liters of Fuel	35	l/100 km
Transport Distance (PCR assumption)	3500	km
Capacity Utilization	85	%

Product Installation

CommScope TENIO closures are distributed and installed by trained technicians in accordance with applicable local and national standards. Installation involves only the management of packaging waste, as there is no energy consumption, material loss, or use of auxiliary materials during the process. The product is designed for complete manual installation without the need for power tools, resulting in negligible electricity use and no installation scrap.

Installation into the building (A5)		
Name	Max	Unit
Auxiliary materials	-	kg
Water consumption	-	m ³
Other resources	-	kg
Electricity consumption	-	kWh
Other energy carriers	-	MJ
Product loss per functional unit	0.00E+00	kg
Waste materials at construction site	0.00E+00	kg
Output substance (recycle)	0.00E+00	kg
Output substance (landfill)	0.00E+00	kg
Output substance (incineration)	0.00E+00	kg
Packaging waste (recycle)	1.08E+00	kg
Packaging waste (landfill)	4.05E-01	kg
Packaging waste (incineration)	6.48E-01	kg
Direct emissions to ambient air*, soil, and water	0.00E+00	kg CO ₂
VOC emissions	-	kg

*CO2 emissions to air from disposal of packaging

Reference Service Life		
Name	Value	Unit
Reference Service Life	25	years
Declared product properties (at the gate) and finishes, etc.	-	
Design application parameters (if instructed by the manufacturer), including the references to the appropriate practices and application codes	-	
An assumed quality of work, when installed in accordance with the manufacturer's instructions	-	
Outdoor environment, (for outdoor applications), e.g. weathering, pollutants, UV and wind exposure, building orientation, shading, temperature	-	
Indoor environment (for indoor applications), e.g. temperature, moisture, chemical exposure	-	
Usage conditions, e.g. frequency of use, mechanical exposure	-	
Maintenance e.g. required frequency, type and quality and replacement of components	-	

Product Use

No cleaning, maintenance, repair, replacement or refurbishment is required. There is no operational energy or water use.

Operational Energy Use (B6)		
Name	Value	Unit
Ancillary materials specified by material	-	kg
Net freshwater consumption	-	m ³
Electricity consumption	-	kWh
Power output of equipment	-	kWh
Characteristic performance	-	-

Disposal

The product can be manually disassembled to separate different individual parts or materials for disposal. Most of the parts are disposed through waste incineration with energy recovery or landfilled, in accordance with the PCR.

End of Life (C2-C4)		
Name	Max	Unit
Collected separately	5.01E+00	kg
Collected as mixed waste	1.79E+00	kg
Reuse	0.00E+00	kg
Recycling	1.34E+00	kg
Landfilling	6.56E-02	kg
Incineration with energy recovery	3.92E-01	kg
Energy conversion- Electricity	20	%
Energy conversion- Heat	50	%

Re-use Phase

Re-use of the product is not common. However, energy in the form of heat and electricity has been recovered from the waste processing of packaging materials at the Installation stage (A5) and waste processing of product materials at the end-of-life disposal stage (C2-C4). Energy recovery for the incineration of polymer materials were calculated according to Appendix D of the Part A PCR.

Energy recovery Potential (D)		
Name	Max	Unit
Net energy benefit of energy recovery from packaging wastes incineration (A5-Installation) in the form of heat	3.50E+00	MJ
Net energy benefit of energy recovery from packaging wastes incineration (A5-Installation) in the form of electricity	1.40E+00	MJ
Net energy benefit of energy recovery from product wastes incineration (C2-C4 End of life Disposal) in the form of heat	3.27E+01	MJ
Net energy benefit of energy recovery from product wastes incineration (C2-C4 End of life Disposal) in the form of electricity	1.31E+01	MJ
Total Net energy benefits of energy recovery in the form of heat	3.62E+01	MJ
Total Net energy benefits of energy recovery in the form of electricity	1.45E+01	MJ

LCA Results - Impact for the Product “TENIO- B6 Closure”

Results shown below were calculated using the CML-IA baseline V3.11 / EU25 methodology

CML-IA baseline- Impact Assessment									
Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Abiotic depletion	kg Sb eq	3.49E-04	3.44E-04	4.31E-06	2.80E-07	9.51E-07	1.39E-07	2.59E-08	-1.37E-06
Abiotic depletion (fossil fuels)	MJ	3.01E+02	2.72E+02	2.20E+01	1.43E+00	4.86E+00	5.29E-01	3.01E-01	-7.43E+00
Global warming (GWP100a)	kg CO2 eq	2.22E+01	1.72E+01	1.52E+00	9.91E-02	3.37E-01	2.92E+00	1.09E-01	-6.35E-01
Ozone layer depletion (ODP)	kg CFC-11 eq	3.86E-06	3.83E-06	2.67E-08	1.74E-09	5.90E-09	8.28E-10	3.18E-10	-8.67E-09
Photochemical oxidation	kg C2H4 eq	4.26E-03	3.93E-03	2.34E-04	1.52E-05	5.17E-05	1.00E-05	1.93E-05	-1.19E-04
Acidification	kg SO2 eq	7.51E-02	6.96E-02	3.85E-03	2.50E-04	8.50E-04	4.69E-04	6.60E-05	-2.68E-03
Eutrophication	kg PO4--- eq	5.23E-02	3.09E-02	1.05E-03	6.84E-05	2.32E-04	3.52E-04	1.96E-02	-2.09E-03

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results shown below were calculated using TRACI 2.2 V1.00/ US-Canadian 2008 Methodology

TRACI 2.2- Impact Assessment									
Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Ozone depletion	kg CFC-11 eq	3.94E-06	3.90E-06	3.54E-08	2.30E-09	7.80E-09	9.52E-10	4.19E-10	-1.11E-08
Global warming	kg CO2 eq	2.21E+01	1.71E+01	1.51E+00	9.82E-02	3.34E-01	2.93E+00	1.00E-01	-6.31E-01
Smog	kg O3 eq	1.08E+00	9.21E-01	1.08E-01	7.01E-03	2.38E-02	1.84E-02	2.35E-03	-2.62E-02
Acidification	kg SO2 eq	8.50E-02	7.85E-02	4.49E-03	2.92E-04	9.92E-04	6.17E-04	8.95E-05	-2.59E-03
Freshwater eutrophication	kg P eq	5.98E-03	3.21E-03	6.30E-05	4.10E-06	1.39E-05	2.68E-05	2.66E-03	-2.73E-04
Marine eutrophication	kg N eq	1.43E-02	1.16E-02	9.23E-04	6.00E-05	2.04E-04	1.71E-04	1.27E-03	-2.57E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results shown below were calculated using EN 15804 + A2 (adapted) V1.03 Methodology.

EN 15804+A2 (adapted)- Impact Assessment									
Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Acidification	mol H+ eq	9.82E-02	9.09E-02	5.07E-03	3.30E-04	1.12E-03	6.61E-04	9.06E-05	-3.15E-03
Climate change	kg CO2 eq	2.18E+01	1.68E+01	1.54E+00	9.98E-02	3.39E-01	2.93E+00	1.14E-01	-6.58E-01
Climate change - Biogenic	kg CO2 eq	9.35E-04	-5.08E-01	9.38E-04	6.09E-05	2.07E-04	5.07E-01	1.20E-04	0.00E+00
Climate change - Fossil	kg CO2 eq	2.23E+01	1.73E+01	1.53E+00	9.97E-02	3.39E-01	2.93E+00	1.13E-01	-6.35E-01
Climate change - Land use and LU change	kg CO2 eq	2.06E-02	1.99E-02	5.51E-04	3.58E-05	1.22E-04	2.24E-05	3.29E-06	-1.89E-03
Ecotoxicity, freshwater	CTUe	1.42E+02	1.33E+02	2.63E+00	1.71E-01	5.80E-01	5.62E+00	3.30E-01	-1.40E+00
Ecotoxicity, freshwater - inorganics	CTUe	1.33E+02	1.24E+02	2.53E+00	1.64E-01	5.57E-01	5.62E+00	3.28E-01	-1.39E+00
Ecotoxicity, freshwater - organics	CTUe	9.03E+00	8.89E+00	1.05E-01	6.80E-03	2.31E-02	5.06E-03	2.07E-03	-1.36E-02
Particulate matter	Disease.	1.23E-06	1.03E-06	1.55E-07	1.01E-08	3.43E-08	3.47E-09	2.14E-09	-1.08E-08
Eutrophication, marine	kg N eq	2.21E-02	1.70E-02	1.72E-03	1.12E-04	3.80E-04	3.75E-04	2.51E-03	-5.57E-04
Eutrophication, freshwater	kg P eq	5.85E-03	5.70E-03	1.08E-04	7.03E-06	2.39E-05	9.49E-06	1.03E-06	-5.85E-04
Eutrophication, terrestrial	mol N eq	2.65E-01	2.37E-01	1.88E-02	1.22E-03	4.14E-03	3.21E-03	4.02E-04	-4.77E-03
Human toxicity, cancer	CTUh	9.57E-09	8.99E-09	2.51E-10	1.63E-11	5.53E-11	2.45E-10	4.59E-12	-9.24E-11
Human toxicity, cancer - inorganics	CTUh	4.60E-09	4.24E-09	1.08E-10	7.00E-12	2.38E-11	2.16E-10	3.08E-12	-5.50E-11
Human toxicity, cancer - organics	CTUh	4.97E-09	4.76E-09	1.43E-10	9.28E-12	3.15E-11	2.96E-11	1.51E-12	-3.74E-11
Human toxicity, non-cancer	CTUh	2.38E-07	2.10E-07	1.44E-08	9.39E-10	3.19E-09	8.63E-09	6.65E-10	-4.38E-09
Human toxicity, non-cancer - inorganics	CTUh	2.27E-07	2.00E-07	1.35E-08	8.80E-10	2.99E-09	8.61E-09	5.33E-10	-4.23E-09
Human toxicity, non-cancer - organics	CTUh	1.11E-08	9.80E-09	8.96E-10	5.82E-11	1.98E-10	1.60E-11	1.31E-10	-1.42E-10
Ionising radiation	kBq U-235 eq	1.73E+00	1.70E+00	2.51E-02	1.63E-03	5.55E-03	9.23E-04	5.45E-04	-4.15E-01
Land use	Pt	1.65E+02	1.35E+02	2.26E+01	1.47E+00	4.98E+00	1.56E-01	7.41E-01	-2.08E+00
Ozone depletion	kg CFC11 eq	3.66E-06	3.62E-06	3.36E-08	2.18E-09	7.41E-09	9.15E-10	3.98E-10	-1.06E-08
Photochemical ozone formation	kg NMVOC eq	7.62E-02	6.49E-02	8.04E-03	5.23E-04	1.78E-03	8.05E-04	1.71E-04	-1.53E-03
Resource use, fossils	MJ	3.34E+02	3.04E+02	2.24E+01	1.46E+00	4.95E+00	5.44E-01	3.09E-01	-1.48E+01
Resource use, minerals and metals	kg Sb eq	3.49E-04	3.44E-04	4.31E-06	2.80E-07	9.51E-07	1.39E-07	2.59E-08	-1.35E-06
Water use	m3 depriv.	6.16E+00	5.94E+00	1.02E-01	6.63E-03	2.25E-02	9.28E-02	-5.45E-03	-1.39E-01

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

The results below contain the resource use throughout the life cycle of the product.

	Parameters	Unit	Total	A1-A3	A4	A5	C2	C3	C4
PERE	Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	3.75E+01	3.71E+01	3.46E-01	2.25E-02	7.64E-02	2.22E-02	8.77E-03
PERM	Use of renewable primary energy resources used as raw materials	MJ	1.49E+01	1.49E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	Total use of renewable primary energy resources	MJ	5.24E+01	5.19E+01	3.46E-01	2.25E-02	7.64E-02	2.22E-02	8.77E-03
PENRE	Use of non-renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	3.58E+02	3.27E+02	2.39E+01	1.55E+00	5.27E+00	5.90E-01	3.29E-01
PENRM	Use of non-renewable primary energy resources used as raw materials	MJ	7.99E+01	7.99E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	Total use of non-renewable primary energy resources	MJ	4.38E+02	4.07E+02	2.39E+01	1.55E+00	5.27E+00	5.90E-01	3.29E-01
SM	Use of secondary material	kg	8.84E-01	8.84E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	Use of non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	Net use of fresh water	m ³	6.15E+00	5.93E+00	1.02E-01	6.64E-03	2.26E-02	9.21E-02	-3.40E-03

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

The results below contain the waste and output flows throughout the life cycle of the product.

Parameters		Units	Total	A1-A3	A4	A5	C2	C3	C4
HWD	Hazardous waste disposed	kg	6.46E-02	3.87E-02	6.40E-04	4.16E-05	1.41E-04	2.50E-02	2.51E-05
NHWD	Non-hazardous waste disposed	kg	5.50E+00	1.61E+00	1.93E+00	1.26E-01	4.27E-01	3.09E-02	1.38E+00
RWD	Radioactive waste disposed	kg	4.36E-04	4.27E-04	6.17E-06	4.01E-07	1.36E-06	2.33E-07	1.25E-07
CRU	Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	Materials for recycling	kg	6.10E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.10E-01	0.00E+00
MER	Materials for energy recovery	kg	1.23E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.23E+00	0.00E+00
EE	Exported energy	MJ	2.40E+01	0.00E+00	0.00E+00	1.72E+01	0.00E+00	6.86E+00	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

LCA Results - Impact for the Product “TENIO- C6H Closure”

Results shown below were calculated using the CML-IA baseline V3.11 / EU25 methodology

CML-IA baseline- Impact Assessment									
Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Abiotic depletion	kg Sb eq	3.92E-04	3.86E-04	4.65E-06	2.63E-07	1.07E-06	1.53E-07	2.86E-08	-1.48E-06
Abiotic depletion (fossil fuels)	MJ	3.32E+02	3.00E+02	2.38E+01	1.34E+00	5.45E+00	5.81E-01	3.32E-01	-8.07E+00
Global warming (GWP100a)	kg CO2 eq	2.43E+01	1.89E+01	1.65E+00	9.30E-02	3.77E-01	3.21E+00	1.19E-01	-6.89E-01
Ozone layer depletion (ODP)	kg CFC-11 eq	3.90E-06	3.86E-06	2.89E-08	1.63E-09	6.61E-09	9.09E-10	3.51E-10	-9.42E-09
Photochemical oxidation	kg C2H4 eq	4.72E-03	4.37E-03	2.53E-04	1.43E-05	5.79E-05	1.10E-05	2.12E-05	-1.30E-04
Acidification	kg SO2 eq	8.36E-02	7.77E-02	4.15E-03	2.35E-04	9.52E-04	5.15E-04	7.29E-05	-2.91E-03
Eutrophication	kg PO4--- eq	5.79E-02	3.45E-02	1.14E-03	6.42E-05	2.60E-04	3.86E-04	2.15E-02	-2.27E-03

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results shown below were calculated using TRACI 2.2 V1.00/ US-Canadian 2008 Methodology

TRACI 2.2- Impact Assessment									
Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Ozone depletion	kg CFC-11 eq	3.99E-06	3.94E-06	3.81E-08	2.16E-09	8.74E-09	1.05E-09	4.63E-10	-1.20E-08
Global warming	kg CO2 eq	2.42E+01	1.88E+01	1.63E+00	9.22E-02	3.74E-01	3.21E+00	1.10E-01	-6.85E-01
Smog	kg O3 eq	1.18E+00	1.01E+00	1.16E-01	6.58E-03	2.67E-02	2.02E-02	2.60E-03	-2.84E-02
Acidification	kg SO2 eq	9.51E-02	8.81E-02	4.85E-03	2.74E-04	1.11E-03	6.78E-04	9.89E-05	-2.81E-03
Freshwater eutrophication	kg P eq	6.61E-03	3.58E-03	6.80E-05	3.85E-06	1.56E-05	2.94E-05	2.92E-03	-2.97E-04
Marine eutrophication	kg N eq	1.61E-02	1.32E-02	9.95E-04	5.63E-05	2.28E-04	1.87E-04	1.39E-03	-2.80E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results shown below were calculated using EN 15804 + A2 (adapted) V1.03 Methodology.

EN 15804+A2 (adapted)- Impact Assessment									
Impact category	Unit	Total	A1-A3	A4	A5	C2	C3	C4	D
Acidification	mol H+ eq	1.10E-01	1.02E-01	5.48E-03	3.10E-04	1.25E-03	7.26E-04	1.00E-04	-3.43E-03
Climate change	kg CO2 eq	2.40E+01	1.85E+01	1.66E+00	9.36E-02	3.80E-01	3.21E+00	1.25E-01	-7.15E-01
Climate change - Biogenic	kg CO2 eq	1.10E-04	-4.90E-01	1.01E-03	5.72E-05	2.32E-04	4.88E-01	1.31E-04	0.00E+00
Climate change - Fossil	kg CO2 eq	2.44E+01	1.90E+01	1.65E+00	9.36E-02	3.79E-01	3.21E+00	1.25E-01	-6.89E-01
Climate change - Land use and LU change	kg CO2 eq	2.19E-02	2.11E-02	5.94E-04	3.36E-05	1.36E-04	2.46E-05	3.67E-06	-2.06E-03
Ecotoxicity, freshwater	CTUe	1.60E+02	1.50E+02	2.84E+00	1.60E-01	6.50E-01	6.18E+00	3.63E-01	-1.53E+00
Ecotoxicity, freshwater - inorganics	CTUe	1.50E+02	1.40E+02	2.72E+00	1.54E-01	6.24E-01	6.17E+00	3.60E-01	-1.51E+00
Ecotoxicity, freshwater - organics	CTUe	9.79E+00	9.64E+00	1.13E-01	6.38E-03	2.59E-02	5.56E-03	2.29E-03	-1.47E-02
Particulate matter	Disease.	1.38E-06	1.16E-06	1.68E-07	9.47E-09	3.84E-08	3.81E-09	2.36E-09	-1.18E-08
Eutrophication, marine	kg N eq	2.41E-02	1.86E-02	1.86E-03	1.05E-04	4.26E-04	4.12E-04	2.76E-03	-6.05E-04
Eutrophication, freshwater	kg P eq	6.52E-03	6.36E-03	1.17E-04	6.60E-06	2.68E-05	1.04E-05	1.13E-06	-6.36E-04
Eutrophication, terrestrial	mol N eq	3.00E-01	2.70E-01	2.02E-02	1.14E-03	4.64E-03	3.52E-03	4.44E-04	-5.19E-03
Human toxicity, cancer	CTUh	1.08E-08	1.02E-08	2.70E-10	1.53E-11	6.20E-11	2.69E-10	5.05E-12	-1.00E-10
Human toxicity, cancer - inorganics	CTUh	5.20E-09	4.81E-09	1.16E-10	6.57E-12	2.66E-11	2.37E-10	3.38E-12	-5.97E-11
Human toxicity, cancer - organics	CTUh	5.61E-09	5.38E-09	1.54E-10	8.71E-12	3.53E-11	3.25E-11	1.67E-12	-4.06E-11
Human toxicity, non-cancer	CTUh	2.66E-07	2.36E-07	1.56E-08	8.81E-10	3.57E-09	9.48E-09	7.30E-10	-4.75E-09
Human toxicity, non-cancer - inorganics	CTUh	2.54E-07	2.25E-07	1.46E-08	8.26E-10	3.35E-09	9.46E-09	5.86E-10	-4.60E-09
Human toxicity, non-cancer - organics	CTUh	1.19E-08	1.05E-08	9.66E-10	5.46E-11	2.21E-10	1.76E-11	1.44E-10	-1.54E-10
Ionising radiation	kBq U-235 eq	1.92E+00	1.89E+00	2.71E-02	1.53E-03	6.21E-03	1.01E-03	6.00E-04	-4.51E-01
Land use	Pt	1.73E+02	1.41E+02	2.43E+01	1.38E+00	5.58E+00	1.71E-01	8.18E-01	-2.26E+00
Ozone depletion	kg CFC11 eq	3.71E-06	3.66E-06	3.62E-08	2.05E-09	8.30E-09	1.00E-09	4.40E-10	-1.15E-08
Photochemical ozone formation	kg NMVOC eq	8.36E-02	7.14E-02	8.68E-03	4.91E-04	1.99E-03	8.84E-04	1.88E-04	-1.66E-03
Resource use, fossils	MJ	3.67E+02	3.35E+02	2.42E+01	1.37E+00	5.55E+00	5.97E-01	3.41E-01	-1.60E+01
Resource use, minerals and metals	kg Sb eq	3.92E-04	3.86E-04	4.65E-06	2.63E-07	1.07E-06	1.53E-07	2.85E-08	-1.46E-06
Water use	m3 depriv.	6.73E+00	6.50E+00	1.10E-01	6.22E-03	2.52E-02	1.02E-01	-5.88E-03	-1.51E-01

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

The results below contain the resource use throughout the life cycle of the product.

Parameters		Unit	Total	A1-A3	A4	A5	C2	C3	C4
PERE	Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	3.97E+01	3.92E+01	3.73E-01	2.11E-02	8.56E-02	2.44E-02	9.64E-03
PERM	Use of renewable primary energy resources used as raw materials	MJ	1.40E+01	1.40E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PERT	Total use of renewable primary energy resources	MJ	5.37E+01	5.32E+01	3.73E-01	2.11E-02	8.56E-02	2.44E-02	9.64E-03
PENRE	Use of non-renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	3.94E+02	3.60E+02	2.57E+01	1.46E+00	5.90E+00	6.48E-01	3.63E-01
PENRM	Use of non-renewable primary energy resources used as raw materials	MJ	8.78E+01	8.78E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
PENRT	Total use of non-renewable primary energy resources	MJ	4.82E+02	4.48E+02	2.57E+01	1.46E+00	5.90E+00	6.48E-01	3.63E-01
SM	Use of secondary material	kg	9.11E-01	9.11E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
RSF	Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
NRSF	Use of non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
FW	Net use of fresh water	m ³	6.73E+00	6.49E+00	1.10E-01	6.23E-03	2.53E-02	1.01E-01	-3.62E-03

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

The results below contain the waste and output flows throughout the life cycle of the product.

Parameters		Units	Total	A1-A3	A4	A5	C2	C3	C4
HWD	Hazardous waste disposed	kg	7.33E-02	4.49E-02	6.91E-04	3.90E-05	1.58E-04	2.74E-02	2.76E-05
NHWD	Non-hazardous waste disposed	kg	6.02E+00	1.78E+00	2.09E+00	1.18E-01	4.78E-01	3.39E-02	1.52E+00
RWD	Radioactive waste disposed	kg	4.85E-04	4.76E-04	6.66E-06	3.77E-07	1.53E-06	2.56E-07	1.37E-07
CRU	Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
MFR	Materials for recycling	kg	7.28E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.28E-01	0.00E+00
MER	Materials for energy recovery	kg	1.35E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.35E+00	0.00E+00
EE	Exported energy	MJ	5.01E+01	0.00E+00	0.00E+00	4.37E+00	0.00E+00	4.57E+01	0.00E+00

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

LCA Results - Impact for the Product “Accessories- Mounting Bracket”

Results shown below were calculated using the CML-IA baseline V3.11 / EU25 methodology

Impact category	Unit	Total	A1-A2	A4	A5	C2	C4	D
Abiotic depletion	kg Sb eq	9.84E-05	9.67E-05	1.30E-06	7.83E-08	2.93E-07	1.82E-09	-2.29E-08
Abiotic depletion (fossil fuels)	MJ	7.29E+01	6.43E+01	6.64E+00	4.00E-01	1.50E+00	3.01E-02	-1.25E-01
Global warming (GWP100a)	kg CO2 eq	6.33E+00	5.74E+00	4.60E-01	2.77E-02	1.04E-01	1.23E-03	-1.06E-02
Ozone layer depletion (ODP)	kg CFC-11 eq	6.73E-08	5.69E-08	8.07E-09	4.85E-10	1.82E-09	2.75E-11	-1.45E-10
Photochemical oxidation	kg C2H4 eq	2.09E-03	2.00E-03	7.06E-05	4.25E-06	1.59E-05	3.72E-07	-2.00E-06
Acidification	kg SO2 eq	5.10E-02	4.95E-02	1.16E-03	6.99E-05	2.62E-04	6.41E-06	-4.48E-05
Eutrophication	kg PO4--- eq	1.68E-02	1.64E-02	3.17E-04	1.91E-05	7.15E-05	1.60E-06	-3.50E-05

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results shown below were calculated using TRACI 2.2 V1.00/ US-Canadian 2008 Methodology

Impact category	Unit	Total	A1-A2	A4	A5	C2	C4	D
Ozone depletion	kg CFC-11 eq	8.61E-08	7.23E-08	1.07E-08	6.42E-10	2.40E-09	3.64E-11	-1.86E-10
Global warming	kg CO2 eq	6.28E+00	5.69E+00	4.56E-01	2.74E-02	1.03E-01	1.21E-03	-1.06E-02
Smog	kg O3 eq	7.85E-01	7.43E-01	3.25E-02	1.96E-03	7.33E-03	2.10E-04	-4.39E-04
Acidification	kg SO2 eq	5.74E-02	5.56E-02	1.36E-03	8.16E-05	3.06E-04	7.84E-06	-4.34E-05
Freshwater eutrophication	kg P eq	1.48E-03	1.45E-03	1.90E-05	1.14E-06	4.29E-06	6.61E-08	-4.58E-06
Marine eutrophication	kg N eq	1.02E-02	9.87E-03	2.78E-04	1.67E-05	6.27E-05	1.78E-06	-4.31E-06

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results shown below were calculated using EN 15804 + A2 (adapted) V1.03 Methodology.

Impact category	Unit	Total	A1-A2	A4	A5	C2	C4	D
Acidification	mol H+ eq	6.92E-02	6.73E-02	1.53E-03	9.21E-05	3.45E-04	8.68E-06	-5.28E-05
Climate change	kg CO2 eq	6.30E+00	5.70E+00	4.63E-01	2.79E-02	1.04E-01	1.24E-03	-1.10E-02
Climate change - Biogenic	kg CO2 eq	-1.80E-05	-2.27E-02	2.83E-04	1.70E-05	2.24E-02	6.06E-07	0.00E+00
Climate change - Fossil	kg CO2 eq	6.31E+00	5.72E+00	4.63E-01	2.78E-02	1.04E-01	1.24E-03	-1.06E-02
Climate change - Land use and LU change	kg CO2 eq	6.99E-03	6.78E-03	1.66E-04	1.00E-05	3.75E-05	7.04E-07	-3.17E-05
Ecotoxicity, freshwater	CTUe	4.89E+01	4.78E+01	7.93E-01	4.77E-02	1.79E-01	2.19E-03	-2.35E-02
Ecotoxicity, freshwater - inorganics	CTUe	4.77E+01	4.67E+01	7.62E-01	4.58E-02	1.72E-01	2.05E-03	-2.33E-02
Ecotoxicity, freshwater - organics	CTUe	1.14E+00	1.10E+00	3.16E-02	1.90E-03	7.12E-03	1.47E-04	-2.27E-04
Particulate matter	Disease.	5.95E-07	5.34E-07	4.68E-08	2.82E-09	1.06E-08	2.00E-10	-1.82E-10
Eutrophication, marine	kg N eq	1.39E-02	1.32E-02	5.20E-04	3.13E-05	1.17E-04	3.33E-06	-9.34E-06
Eutrophication, freshwater	kg P eq	2.63E-03	2.59E-03	3.26E-05	1.96E-06	7.36E-06	1.09E-07	-9.81E-06
Eutrophication, terrestrial	mol N eq	2.13E-01	2.05E-01	5.66E-03	3.41E-04	1.28E-03	3.64E-05	-8.00E-05
Human toxicity, cancer	CTUh	5.52E-09	5.42E-09	7.56E-11	4.55E-12	1.70E-11	2.23E-13	-1.55E-12
Human toxicity, cancer - inorganics	CTUh	2.64E-09	2.60E-09	3.25E-11	1.96E-12	7.32E-12	7.29E-14	-9.22E-13
Human toxicity, cancer - organics	CTUh	2.88E-09	2.82E-09	4.31E-11	2.59E-12	9.71E-12	1.51E-13	-6.27E-13
Human toxicity, non-cancer	CTUh	8.85E-08	8.29E-08	4.36E-09	2.62E-10	9.82E-10	5.02E-12	-7.33E-11
Human toxicity, non-cancer - inorganics	CTUh	8.51E-08	7.98E-08	4.09E-09	2.46E-10	9.21E-10	4.38E-12	-7.10E-11
Human toxicity, non-cancer - organics	CTUh	3.48E-09	3.13E-09	2.70E-10	1.63E-11	6.09E-11	6.40E-13	-2.37E-12
Ionising radiation	kBq U-235 eq	4.66E-01	4.57E-01	7.58E-03	4.56E-04	1.71E-03	1.82E-05	-6.95E-03
Land use	Pt	4.39E+01	3.51E+01	6.81E+00	4.10E-01	1.53E+00	5.96E-02	-3.49E-02
Ozone depletion	kg CFC11 eq	8.12E-08	6.81E-08	1.01E-08	6.09E-10	2.28E-09	3.46E-11	-1.78E-10
Photochemical ozone formation	kg NMVOC eq	4.26E-02	3.95E-02	2.43E-03	1.46E-04	5.47E-04	1.31E-05	-2.57E-05
Resource use, fossils	MJ	8.08E+01	7.21E+01	6.77E+00	4.07E-01	1.53E+00	3.03E-02	-2.47E-01
Resource use, minerals and metals	kg Sb eq	9.84E-05	9.67E-05	1.30E-06	7.82E-08	2.93E-07	1.81E-09	-2.26E-08
Water use	m3 depriv.	1.73E+00	1.69E+00	3.08E-02	1.85E-03	6.94E-03	1.32E-03	-2.33E-03

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

LCA Results - Impact for the Product “Accessories- Cable Fixation”

Results shown below were calculated using the CML-IA baseline V3.11 / EU25 methodology

Impact category	Unit	Total	A1-A2	A4	A5	C2	C4	D
Abiotic depletion	kg Sb eq	3.88E-05	3.83E-05	4.24E-07	1.16E-08	1.10E-07	6.78E-10	-7.76E-09
Abiotic depletion (fossil fuels)	MJ	2.43E+01	2.15E+01	2.17E+00	5.91E-02	5.60E-01	1.12E-02	-4.22E-02
Global warming (GWP100a)	kg CO2 eq	2.06E+00	1.87E+00	1.50E-01	4.09E-03	3.88E-02	4.59E-04	-3.61E-03
Ozone layer depletion (ODP)	kg CFC-11 eq	2.00E-08	1.66E-08	2.63E-09	7.17E-11	6.80E-10	1.03E-11	-4.93E-11
Photochemical oxidation	kg C2H4 eq	5.46E-04	5.16E-04	2.30E-05	6.28E-07	5.96E-06	1.39E-07	-6.78E-07
Acidification	kg SO2 eq	1.08E-02	1.03E-02	3.79E-04	1.03E-05	9.79E-05	2.40E-06	-1.52E-05
Eutrophication	kg PO4--- eq	5.14E-03	5.01E-03	1.04E-04	2.82E-06	2.68E-05	5.99E-07	-1.19E-05

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

Results shown below were calculated using TRACI 2.2 V1.00/ US-Canadian 2008 Methodology

Impact category	Unit	Total	A1-A2	A4	A5	C2	C4	D
Ozone depletion	kg CFC-11 eq	2.52E-08	2.07E-08	3.48E-09	9.48E-11	8.99E-10	1.36E-11	-6.30E-11
Global warming	kg CO2 eq	2.04E+00	1.85E+00	1.49E-01	4.05E-03	3.85E-02	4.52E-04	-3.59E-03
Smog	kg O3 eq	1.10E-01	9.62E-02	1.06E-02	2.89E-04	2.74E-03	7.86E-05	-1.49E-04
Acidification	kg SO2 eq	1.28E-02	1.22E-02	4.42E-04	1.21E-05	1.14E-04	2.93E-06	-1.47E-05
Freshwater eutrophication	kg P eq	4.99E-04	4.91E-04	6.20E-06	1.69E-07	1.60E-06	2.47E-08	-1.55E-06
Marine eutrophication	kg N eq	2.52E-03	2.40E-03	9.08E-05	2.47E-06	2.35E-05	6.65E-07	-1.46E-06

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

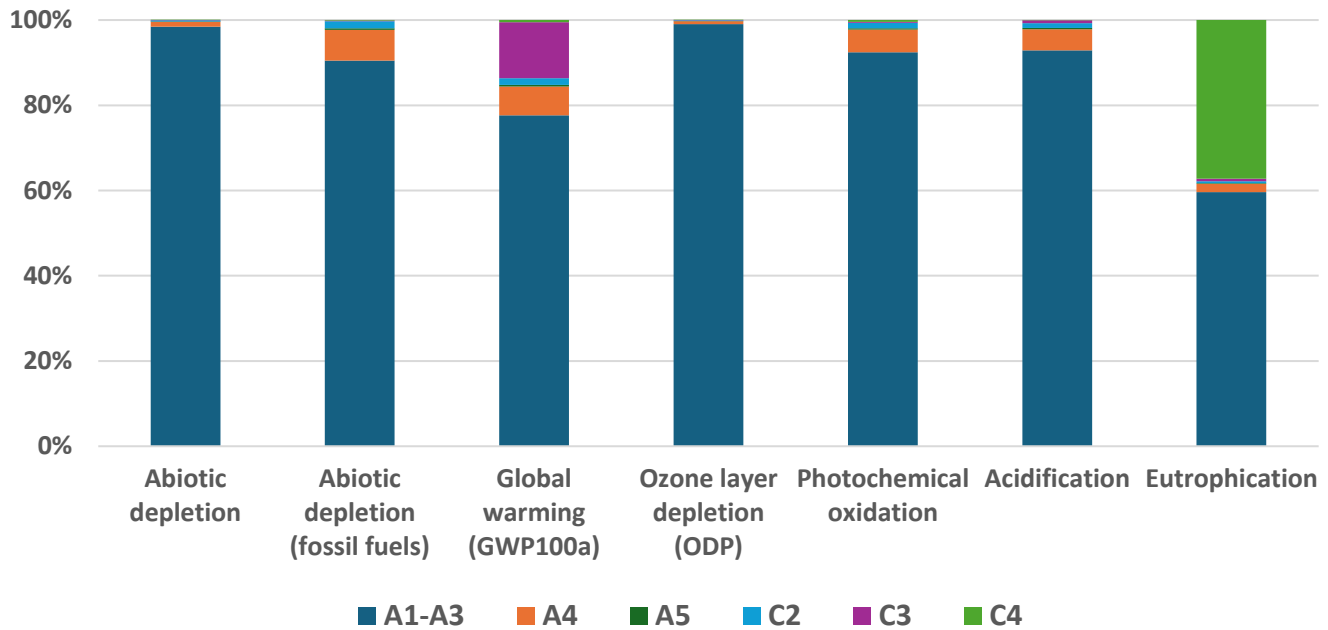
Results shown below were calculated using EN 15804 + A2 (adapted) V1.03 Methodology.

Impact category	Unit	Total	A1-A2	A4	A5	C2	C4	D
Acidification	mol H+ eq	1.59E-02	1.52E-02	4.99E-04	1.36E-05	1.29E-04	3.24E-06	-1.79E-05
Climate change	kg CO2 eq	2.08E+00	1.88E+00	1.51E-01	4.12E-03	3.91E-02	4.64E-04	-3.74E-03
Climate change - Biogenic	kg CO2 eq	1.41E-05	1.44E-02	9.23E-05	2.51E-06	-1.45E-02	2.27E-07	0.00E+00
Climate change - Fossil	kg CO2 eq	2.06E+00	1.86E+00	1.51E-01	4.11E-03	3.90E-02	4.63E-04	-3.61E-03
Climate change - Land use and LU change	kg CO2 eq	1.86E-03	1.79E-03	5.42E-05	1.48E-06	1.40E-05	2.63E-07	-1.08E-05
Ecotoxicity, freshwater	CTUe	1.80E+01	1.77E+01	2.59E-01	7.05E-03	6.69E-02	8.20E-04	-7.98E-03
Ecotoxicity, freshwater - inorganics	CTUe	1.77E+01	1.74E+01	2.48E-01	6.77E-03	6.42E-02	7.65E-04	-7.90E-03
Ecotoxicity, freshwater - organics	CTUe	3.07E-01	2.94E-01	1.03E-02	2.81E-04	2.66E-03	5.51E-05	-7.71E-05
Particulate matter	Disease.	2.22E-07	2.02E-07	1.53E-08	4.16E-10	3.95E-09	7.46E-11	-6.16E-11
Eutrophication, marine	kg N eq	2.49E-03	2.27E-03	1.70E-04	4.62E-06	4.39E-05	1.24E-06	-3.17E-06
Eutrophication, freshwater	kg P eq	8.86E-04	8.72E-04	1.06E-05	2.90E-07	2.75E-06	4.06E-08	-3.33E-06
Eutrophication, terrestrial	mol N eq	5.27E-02	5.03E-02	1.85E-03	5.03E-05	4.77E-04	1.36E-05	-2.71E-05
Human toxicity, cancer	CTUh	1.87E-09	1.84E-09	2.47E-11	6.72E-13	6.37E-12	8.35E-14	-5.25E-13
Human toxicity, cancer - inorganics	CTUh	8.75E-10	8.61E-10	1.06E-11	2.89E-13	2.74E-12	2.72E-14	-3.13E-13
Human toxicity, cancer - organics	CTUh	9.93E-10	9.75E-10	1.41E-11	3.83E-13	3.63E-12	5.63E-14	-2.13E-13
Human toxicity, non-cancer	CTUh	3.04E-08	2.86E-08	1.42E-09	3.87E-11	3.68E-10	1.88E-12	-2.49E-11
Human toxicity, non-cancer - inorganics	CTUh	2.93E-08	2.76E-08	1.33E-09	3.63E-11	3.45E-10	1.64E-12	-2.41E-11
Human toxicity, non-cancer - organics	CTUh	1.08E-09	9.71E-10	8.81E-11	2.40E-12	2.28E-11	2.39E-13	-8.05E-13
Ionising radiation	kBq U-235 eq	1.66E-01	1.63E-01	2.47E-03	6.74E-05	6.39E-04	6.79E-06	-2.36E-03
Land use	Pt	1.27E+01	9.87E+00	2.22E+00	6.05E-02	5.74E-01	2.23E-02	-1.18E-02
Ozone depletion	kg CFC11 eq	2.37E-08	1.94E-08	3.30E-09	9.00E-11	8.54E-10	1.29E-11	-6.03E-11
Photochemical ozone formation	kg NMVOC eq	7.29E-03	6.27E-03	7.92E-04	2.16E-05	2.05E-04	4.91E-06	-8.70E-06
Resource use, fossils	MJ	2.75E+01	2.46E+01	2.21E+00	6.02E-02	5.71E-01	1.13E-02	-8.39E-02
Resource use, minerals and metals	kg Sb eq	3.88E-05	3.83E-05	4.24E-07	1.16E-08	1.10E-07	6.78E-10	-7.65E-09
Water use	m3 depriv.	8.40E-01	8.27E-01	1.00E-02	2.74E-04	2.60E-03	4.94E-04	-7.91E-04

*Stages B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

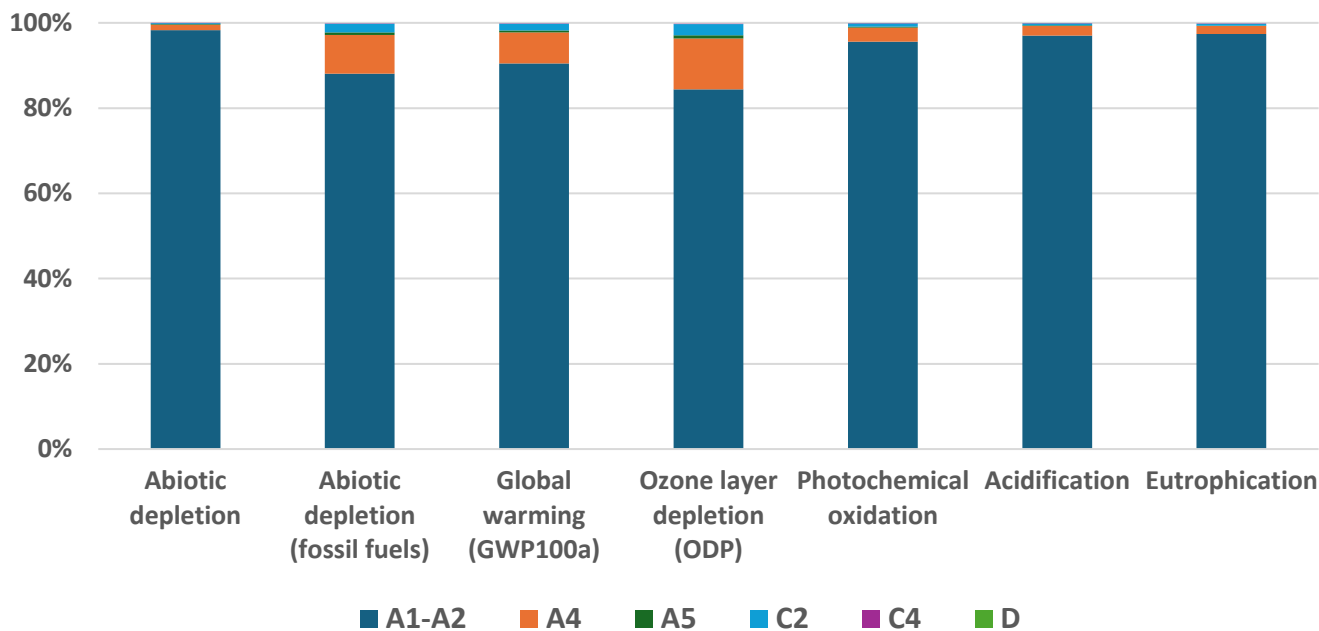
LCA Interpretation - Maximum Impact for the Closure Product “TENIO- C6H Closure”

The below LCA results based on CML method indicates clear dominance of the product stage (A1–A3) across most impact categories. In abiotic depletion, ozone layer depletion (ODP), photochemical oxidation, and acidification, impacts are overwhelmingly driven by A1–A3 (raw material supply, component production, and manufacturing/assembly), while transport to site (A4) and installation (A5) contribute only marginally. Global warming potential (GWP100a) remains primarily driven by A1–A3 but exhibits a notable end-of-life contribution in C3 (waste processing), indicating that material processing at end-of-life meaningfully influences climate impacts. The standout exception is eutrophication, where a large share comes from C4 (final disposal), making end-of-life the key hotspot for that indicator. Overall, the chart suggests that the most effective improvement levers are materials and manufacturing choices (reduce mass, increase recycled content where feasible, and target high-impact polymers/metals) to lower A1–A3, and end-of-life strategy (improve recyclability/material separation and reduce landfill share) to address the elevated C3/C4 contributions, especially for GWP and eutrophication.



LCA Interpretation - Maximum Impact for the Accessories Product “MOBRA- Mounting Bracket”

The below LCA results based on CML method indicate that environmental impacts are strongly dominated by the product stage (A1-A2) across all assessed categories. Abiotic depletion, photochemical oxidation, acidification, and eutrophication are almost entirely driven by the raw material extraction and component manufacturing stage, which is consistent with the mounting bracket being a relatively simple, metal-intensive product. For global warming potential (GWP100a) and abiotic depletion of fossil fuels, a small but visible contribution comes from transport to site (A4), reflecting the influence of logistics relative to the low overall mass and functional simplicity of the product. Ozone layer depletion (ODP) shows a comparatively higher A4 share than other categories, though the product stage remains the primary contributor. End-of-life modules (C2 and C4) and benefits beyond the system boundary (Module D) are negligible in most impact categories. Overall, the main environmental hotspot for this mounting bracket lies in material production and manufacturing, indicating that impact reduction efforts should focus on material choice, mass reduction, and increased recycled content, while optimization of transport distances offers secondary improvement potential.



Additional Environmental Information

Environmental and Health During Manufacturing

CommScope values employees' health, safety and well-being. To this end, we maintain a robust company-wide environment, health and safety (EHS) management system. This is an integrated program based on the requirements of the International Standards of ISO45001 and ISO14001. To support this integrated EHS management system, CommScope utilizes a web-based platform, the BSI Entropy™ tool. This tool supports the management of our EHS processes and operations at the corporate and facility level. All EHS management system records (policies, procedures, method statements, health and safety risk assessments, environmental aspect/impact assessments, legal requirements, permits, training, internal and external audits, incidents and implemented CAPA, KPIs, and other records related to EHS) are maintained and managed in Entropy. In addition, 90% of CommScope manufacturing facilities are certified according to the ISO14001 and ISO45001 standards. Our vision and commitments are detailed in our [EHS Policy](#).

CommScope understands the need to address the environmental impacts of its products and services. CommScope engages product development teams in designing innovative and more sustainable solutions across a product's life cycle—from design and manufacturing to product use and end of life.

CommScope is committed to demonstrating a high standard of global product compliance practices. Through this commitment, we actively monitor global environmental trends and emerging regulatory requirements that may affect our products, operations, supply chain, and customer base. We are committed to be compliant with all applicable environmental product related legal and other requirements. To achieve this, we have a global organization comprising environmental specialists, engineers, and product compliance experts who are constantly ensuring our compliance status is maintained. We manage our compliance using a cross-functional approach with our engineers, designers, quality organization, supply chain organization, and production.

CommScope is committed to upholding the human rights of its employees. To ensure our employees are treated with dignity and respect, we follow a well-established Code of Ethics and Business Conduct and Labor Policy that align with recognized standards and guidelines from the International Labor Organization, the United Nations Global Compact, the UN Universal Declaration of Human Rights, SA8000 and applicable laws.

Environmental and Health During Installation

There is no harmful emissive potential. No damage to health or impairment is expected under normal use corresponding to the intended use of the product.

Extraordinary Effects

Fire

No extraordinary effects to the environment can be anticipated during exposure to fire.

Water

Contains no substances that have any impact on water in case of flood.

Mechanical Destruction

No danger to the environment can be anticipated during mechanical destruction.

Delayed Emissions

Global warming potential is calculated using the CML- IA Baseline 3.11, TRACI 2.2 and EN15804+A2 (adapted) 1.03 impact assessment methodologies. Delayed emissions are not considered.

Environmental Activities and Certifications

Our Sustainability Report details CommScope's efforts to operate the business ethically and with integrity; protect the environment; maintain the health, safety and well-being of our workforce; and support the communities in which we operate. To learn more, view our comprehensive Sustainability Report at <https://www.commscope.com/corporate-responsibility-and-sustainability/>.

CommScope maintains a variety of certifications based on the widely accepted industry standards:

- Quality Management System certification (ISO9001/TL9000)
- Environmental Management System certification (ISO14001)
- Health and Safety Management System certification (ISO45001)

These certificates can be downloaded from our company website:

<https://www.commscope.com/corporate-responsibility-and-sustainability/philosophy/#certifications>

Product sustainability certifications including EPDs and Health Product Declarations (HPDs) can be downloaded from our company website:

<https://www.commscope.com/corporate-responsibility-and-sustainability/product-sustainability/certifications/>

Further Information

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Contact Information

Study Commissioner



For more information, visit our website at

<https://www.commscope.com/>

- Contact customer support for product and technical questions at <https://www.commscope.com/contact-us/>
- Contact product compliance at productsustainability@commscope.com
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