

ENVIRONMENTAL PRODUCT DECLARATION (EPD)

CommScope® - TENIO™ Cable Gel Sealing Products



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™- SKG GEL Sealing

COMMSCOPE®
an Amphenol company



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	EPD 1209
DECLARED PRODUCT & FUNCTIONAL UNIT OR DECLARED UNIT	CommScope TENIO-SKG Cable Gel sealing kit Functional Unit = One piece of Gel sealing kit 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 advanced sealing system, designed for Superior sealing performance, easy Installation, flexibility and customization.
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. ☐ INTERNAL ☒ 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-SKG cable gel sealing kits are mechanical sealing components used in TENIO single-ended fiber optic closures for sealing incoming and outgoing cables at the enclosure interface. The system consists of segmented gel seal elements that are compressed around the cable to provide environmental sealing. Depending on the required cable diameter range, different seal segment variants are combined within the closure.

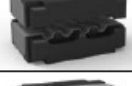
Product Type: Cable gel sealing kit for TENIO closures

Product Characteristics:

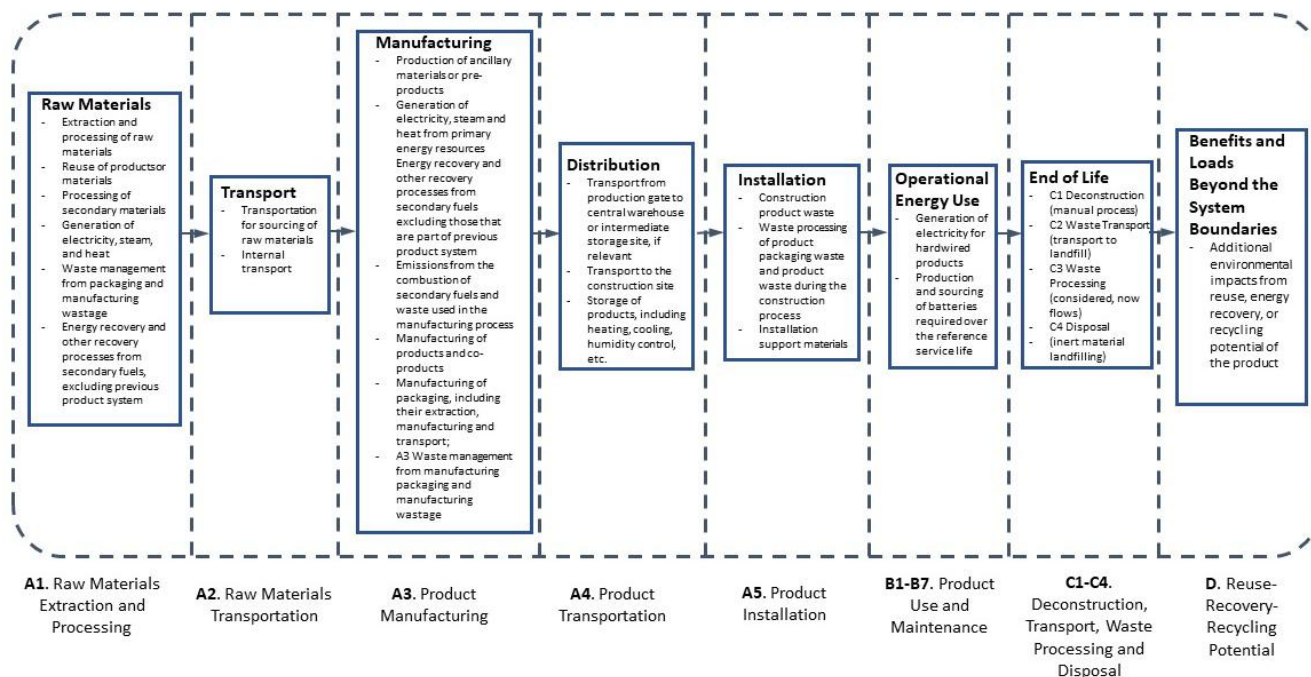
- Mechanical, compressed gel sealing technology
- Modular seal segments adapted to specific cable diameter ranges
- Tool-less installation with mechanical compression and activation mechanism
- Re-enterable and reusable sealing system
- Compatible with multiple cable constructions and jacket types
- Suitable for use in distribution and access network environments
- Provides environmental protection against water ingress through mechanical sealing

This EPD covers the following TENIO-SKG Gel sealing product variants:



	CABLE OUTS	DIAMETER RANGE	MAXIMUM NUMBER OF IN/OUT- LET PORTS
	2a 2b 2c	13-16 11-14 9-12	12
	3a 3b	7-10 5-8	18
	3 flat	3/5 - 6/9	18
	4	3-6	24
	5	2-4	30
	Dummy		

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 each Gel sealing product type and the product type with the highest impact is reported. Other product types are represented through the scaling factor table and can be independently calculated.

Application

The TENIO-SKG Cable Gel sealing kit is designed as a fully wraparound mechanical gel seal for each cable entry port, ensuring reliable environmental protection and quick, tool-less installation while maintaining easy re-entry and cable retention for feeder and distribution network applications.

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 material composition of Gel sealing kit variants is as follows:

Raw materials weight (g)	TENIO-SKG5-2/4	TENIO-SKG4-3/6	TENIO-SKG3-5/8	TENIO-SKG3-7/10	TENIO-SKG2-9/12	TENIO-SKG2-11/14	TENIO-SKG2-13/16	TENIO-SKG3-3/5X6/9	TENIO-SKG-DUMMY
PP	37%	39%	38%	38%	38%	39%	41%	37%	21%
TPE Gel	29%	28%	28%	28%	27%	25%	22%	29%	48%
Cardboard	22%	22%	22%	22%	23%	24%	24%	23%	18%
LDPE Bag	3%	3%	3%	3%	3%	3%	3%	3%	0%
Wooden pallet	9%	9%	9%	9%	9%	9%	9%	9%	13%

Technical Details

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

Technical Data	
General Specifications	
Product Type	Cable sealing
Product Series	TENIO
Application	For use with TENIO Fiber closures
Number of Gel segments	8 gel seal segments per closure
Cable Ports Quantity	6 multi-out ports (up to 30 cables)
Sealing Type	Fully wraparound, 100% mechanical seal
Cable Capacity, maximum	5
Color	Black
Mounting	Click and snap with no screws
Network Area Type	Distribution, Feeder
Single Cable Diameter, maximum	4 mm 0.157 in
Single Cable Diameter, minimum	2 mm 0.079 in
Product weights	Minimum- 0.048 kg & Maximum- 0.073 kg
Environmental Specifications	
Environmental Space	underground, ground-level, and aerial installations
Water resistance qualification	IEC 61300
Sealing compliance	40 kPa and 5m waterhead compliant with prEN50411
Regulatory Compliance	
Quality Management	ISO 9001:2015
Compliance	RoHS compliant

Properties of Declared Product as Shipped

TENIO-SKG cable gel sealings are supplied as modular SKG kits intended for use within TENIO fiber optic closures. Each standard SKG kit contains two gel seal segments (inner and outer), a CTU holder, Cable guide and dummy plugs; the SKG-DUMMY variant contains a single gel segment only. Different SKG kits can be combined within one closure depending on the cable types used, and the appropriate kit is selected based on the cable diameter, which is clearly marked on the gel seals.

SKG for small CTU's:



(Picture for reference only)

	Description
1	CTU holder
2	Yellow dummy plugs
3	Cable guide
4	Gel seal segments (2 pcs)

SKG for large CTU:



(Picture for reference only)

	Description
1	CTU holder
2	Yellow dummy plugs
3	Gel seal segments (2 pcs)

Methodological Framework

Functional Unit

The declaration refers to the functional unit of one piece of TENIO-SKG Gel sealing kit.

	Name	Value	Unit
	Functional Unit	1	Gel sealing kit
TENIO-SKG5-2/4	Maximum Mass	0.073	kg

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 A3, 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 Cable Gel sealing along with TENIO 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.

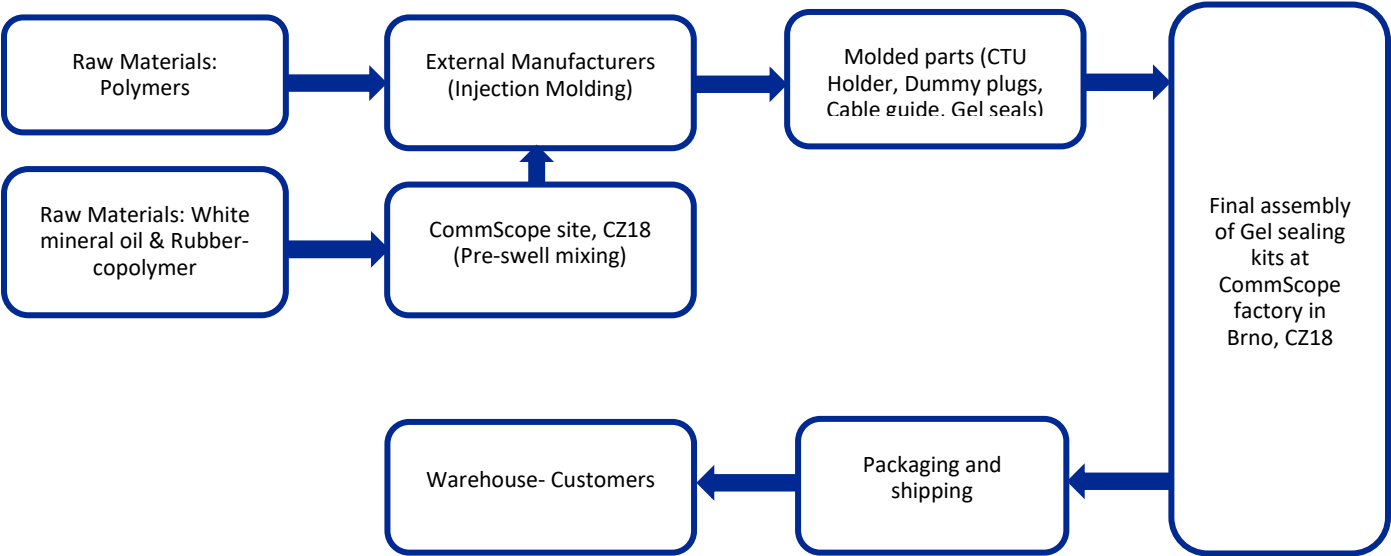
Additional Environmental Information

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 for the TENIO gel sealing components starts with a pre-swell mixing operation at CommScope’s facility in Brno, Czech Republic, where the gel compound is prepared from raw materials such as mineral oil and polymer compounders. The pre-swelled gel material is then transported to an external injection molding partner in Spain, where it is reheated, melted, and injection-molded into the required gel seal segment geometries. Following molding, the finished gel parts are transported back to the CommScope facility in Brno, CZ, where they are used in the final assembly of SKG kits together with plastic holders and dummy elements. The assembled kits are subsequently packaged and distributed to customer warehouses as part of CommScope’s supply chain.



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)	1.28E-02	kg
Packaging waste (landfill)	4.39E-03	kg
Packaging waste (incineration)	7.27E-03	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	2.70E-02	kg
Collected as mixed waste	2.12E-02	kg
Reuse	0.00E+00	kg
Recycling	5.40E-03	kg
Landfilling	2.14E-02	kg
Incineration with energy recovery	2.14E-02	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	5.23E-02	MJ
Net energy benefit of energy recovery from packaging wastes incineration (A5-Installation) in the form of electricity	2.09E-02	MJ
Net energy benefit of energy recovery from product wastes incineration (C2-C4 End of life Disposal) in the form of heat	3.65E-01	MJ
Net energy benefit of energy recovery from product wastes incineration (C2-C4 End of life Disposal) in the form of electricity	1.46E-01	MJ
Total Net energy benefits of energy recovery in the form of heat	4.17E-01	MJ
Total Net energy benefits of energy recovery in the form of electricity	1.67E-01	MJ

LCA Results - Maximum Impact for the Product "TENIO-SKG5-2/4"

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

CML-IA baseline- Impact Assessment									
Impact category	Unit	Total	A1-A2	A4	A5	C2	C3	C4	D
Abiotic depletion	kg Sb eq	9.26E-07	8.27E-07	7.53E-08	7.11E-09	1.42E-08	1.63E-09	3.97E-10	-3.32E-08
Abiotic depletion (fossil fuels)	MJ	5.17E+00	4.66E+00	3.85E-01	3.63E-02	7.27E-02	6.70E-03	4.53E-03	-1.81E-01
Global warming (GWP100a)	kg CO2 eq	2.80E-01	1.93E-01	2.66E-02	2.52E-03	5.03E-03	5.02E-02	1.85E-03	-1.54E-02
Ozone layer depletion (ODP)	kg CFC-11 eq	4.47E-07	4.46E-07	4.67E-10	4.41E-11	8.83E-11	9.42E-12	4.84E-12	-2.11E-10
Photochemical oxidation	kg C2H4 eq	5.33E-05	4.76E-05	4.09E-06	3.86E-07	7.73E-07	1.16E-07	3.26E-07	-2.90E-06
Acidification	kg SO2 eq	6.89E-04	5.96E-04	6.72E-05	6.35E-06	1.27E-05	6.04E-06	9.71E-07	-6.51E-05
Eutrophication	kg PO4--- eq	6.46E-04	2.86E-04	1.84E-05	1.74E-06	3.47E-06	4.89E-06	3.31E-04	-5.08E-05

*Stages A3, 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-A2	A4	A5	C2	C3	C4	D
Ozone depletion	kg CFC-11 eq	4.48E-07	4.48E-07	6.17E-10	5.83E-11	1.17E-10	1.12E-11	6.38E-12	-2.70E-10
Global warming	kg CO2 eq	2.77E-01	1.91E-01	2.64E-02	2.49E-03	4.99E-03	5.02E-02	1.71E-03	-1.54E-02
Smog	kg O3 eq	1.20E-02	9.33E-03	1.88E-03	1.78E-04	3.56E-04	2.45E-04	3.54E-05	-6.37E-04
Acidification	kg SO2 eq	8.08E-04	6.98E-04	7.85E-05	7.42E-06	1.48E-05	7.98E-06	1.28E-06	-6.30E-05
Freshwater eutrophication	kg P eq	8.00E-05	3.20E-05	1.10E-06	1.04E-07	2.08E-07	4.34E-07	4.62E-05	-6.66E-06
Marine eutrophication	kg N eq	1.20E-04	8.68E-05	1.61E-05	1.52E-06	3.05E-06	2.20E-06	1.08E-05	-6.27E-06

*Stages A3, 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-A2	A4	A5	C2	C3	C4	D
Acidification	mol H+ eq	8.56E-04	7.33E-04	8.86E-05	8.38E-06	1.68E-05	8.57E-06	1.34E-06	-7.67E-05
Climate change	kg CO2 eq	2.67E-01	1.80E-01	2.68E-02	2.53E-03	5.07E-03	5.02E-02	1.94E-03	-1.60E-02
Climate change - Biogenic	kg CO2 eq	-1.61E-05	-1.44E-02	1.64E-05	1.55E-06	3.09E-06	1.44E-02	1.93E-06	0.00E+00
Climate change - Fossil	kg CO2 eq	2.81E-01	1.94E-01	2.68E-02	2.53E-03	5.06E-03	5.02E-02	1.94E-03	-1.54E-02
Climate change - Land use and LU change	kg CO2 eq	3.02E-04	2.90E-04	9.62E-06	9.09E-07	1.82E-06	2.50E-07	4.49E-08	-4.61E-05
Ecotoxicity, freshwater	CTUe	1.90E+00	1.79E+00	4.59E-02	4.34E-03	8.68E-03	4.75E-02	2.93E-03	-3.42E-02
Ecotoxicity, freshwater - inorganics	CTUe	1.84E+00	1.73E+00	4.41E-02	4.17E-03	8.33E-03	4.75E-02	2.89E-03	-3.38E-02
Ecotoxicity, freshwater - organics	CTUe	6.21E-02	5.97E-02	1.83E-03	1.73E-04	3.45E-04	5.43E-05	3.28E-05	-3.30E-04
Particulate matter	Disease.	1.17E-08	8.15E-09	2.71E-09	2.56E-10	5.12E-10	4.48E-11	3.23E-11	-2.64E-10
Eutrophication, marine	kg N eq	2.36E-04	1.72E-04	3.01E-05	2.84E-06	5.69E-06	4.57E-06	2.13E-05	-1.36E-05
Eutrophication, freshwater	kg P eq	6.00E-05	5.75E-05	1.89E-06	1.79E-07	3.57E-07	1.12E-07	1.53E-08	-1.42E-05
Eutrophication, terrestrial	mol N eq	2.14E-03	1.67E-03	3.28E-04	3.10E-05	6.19E-05	4.26E-05	6.02E-06	-1.16E-04
Human toxicity, cancer	CTUh	7.23E-11	6.39E-11	4.38E-12	4.13E-13	8.27E-13	2.68E-12	5.86E-14	-2.25E-12
Human toxicity, cancer - inorganics	CTUh	2.00E-11	1.52E-11	1.88E-12	1.78E-13	3.55E-13	2.37E-12	3.58E-14	-1.34E-12
Human toxicity, cancer - organics	CTUh	5.22E-11	4.87E-11	2.49E-12	2.36E-13	4.71E-13	3.07E-13	2.27E-14	-9.10E-13
Human toxicity, non-cancer	CTUh	1.76E-09	1.32E-09	2.52E-10	2.38E-11	4.77E-11	1.05E-10	8.24E-12	-1.07E-10
Human toxicity, non-cancer - inorganics	CTUh	1.58E-09	1.17E-09	2.37E-10	2.24E-11	4.47E-11	1.05E-10	5.97E-12	-1.03E-10
Human toxicity, non-cancer - organics	CTUh	1.72E-10	1.50E-10	1.56E-11	1.48E-12	2.96E-12	1.87E-13	2.27E-12	-3.45E-12
Ionising radiation	kBq U-235 eq	2.33E-02	2.28E-02	4.39E-04	4.15E-05	8.29E-05	1.00E-05	8.05E-06	-1.01E-02
Land use	Pt	2.76E+00	2.24E+00	3.94E-01	3.72E-02	7.45E-02	1.91E-03	1.14E-02	-5.07E-02
Ozone depletion	kg CFC11 eq	4.02E-07	4.02E-07	5.86E-10	5.54E-11	1.11E-10	1.07E-11	6.06E-12	-2.58E-10
Photochemical ozone formation	kg NMVOC eq	1.02E-03	8.30E-04	1.41E-04	1.33E-05	2.66E-05	1.06E-05	2.63E-06	-3.73E-05
Resource use, fossils	MJ	5.58E+00	5.06E+00	3.92E-01	3.70E-02	7.40E-02	6.86E-03	4.65E-03	-3.59E-01
Resource use, minerals and metals	kg Sb eq	9.22E-07	8.23E-07	7.53E-08	7.11E-09	1.42E-08	1.63E-09	3.96E-10	-3.28E-08
Water use	m3 depriv.	6.32E-02	6.01E-02	1.78E-03	1.68E-04	3.37E-04	8.54E-04	-1.05E-04	-3.39E-03

*Stages A3, 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-A2	A4	A5	C2	C3	C4
PERE	Use of renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	5.30E-01	5.22E-01	6.05E-03	5.71E-04	1.14E-03	2.36E-04	1.30E-04
PERM	Use of renewable primary energy resources used as raw materials	MJ	3.46E-01	3.46E-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	8.76E-01	8.68E-01	6.05E-03	5.71E-04	1.14E-03	2.36E-04	1.30E-04
PENRE	Use of non-renewable primary energy excluding renewable primary energy resources used as raw materials	MJ	5.97E+00	5.42E+00	4.17E-01	3.94E-02	7.87E-02	7.46E-03	4.95E-03
PENRM	Use of non-renewable primary energy resources used as raw materials	MJ	2.21E+00	2.21E+00	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	8.18E+00	7.63E+00	4.17E-01	3.94E-02	7.87E-02	7.46E-03	4.95E-03
SM	Use of secondary material	kg	1.51E-02	1.51E-02	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	6.21E-02	5.90E-02	1.79E-03	1.69E-04	3.37E-04	8.49E-04	-7.18E-05

*Stages A3, B1 through B7 and C1 have not been considered and reported as they are not applicable in this LCA study

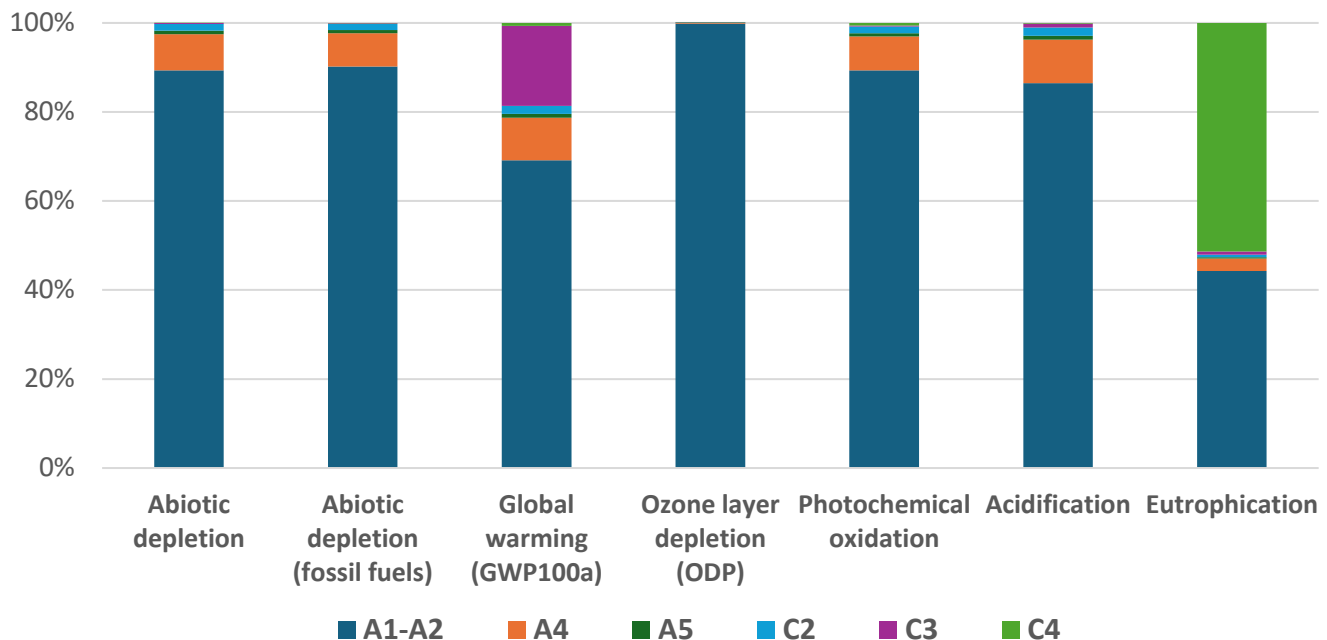
The results below contain the waste and output flows throughout the life cycle of the product.

	Parameters	Units	Total	A1-A2	A4	A5	C2	C3	C4
HWD	Hazardous waste disposed	kg	7.13E-04	3.20E-04	1.06E-06	2.11E-06	3.90E-04	4.15E-07	0.00E+00
NHWD	Non-hazardous waste disposed	kg	6.04E-02	3.03E-02	3.19E-03	6.39E-03	4.10E-04	2.00E-02	0.00E+00
RWD	Radioactive waste disposed	kg	5.83E-06	5.79E-06	1.02E-08	2.04E-08	2.53E-09	1.84E-09	0.00E+00
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	5.00E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.00E-03	0.00E+00
MER	Materials for energy recovery	kg	2.10E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.10E-02	0.00E+00
EE	Exported energy	MJ	5.84E-01	0.00E+00	0.00E+00	7.30E-02	0.00E+00	5.11E-01	0.00E+00

*Stages A3, 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 Gel sealing Product “TENIO-SKG5-2/4”

The below LCA results based on CML method indicates that upstream production (A1–A2) dominates most impact categories, including abiotic depletion, fossil resource depletion, ozone depletion, photochemical oxidation, and acidification, while transport to site (A4) represents a consistent but smaller contribution and installation (A5) and end-of-life transport (C2) are negligible. Global warming potential remains primarily driven by A1–A2, but with a notable additional contribution from end-of-life treatment (C3). Eutrophication differs from the other indicators, with the results indicating a dominant contribution from C4, highlighting the sensitivity of this category to end-of-life scenario and beyond-system-boundary reporting assumptions. Overall, the LCA results indicate that the predominant environmental impacts are associated with the upstream life-cycle stages, notably raw material supply and component manufacturing. Accordingly, potential improvement measures should primarily address material selection, manufacturing processes, and end-of-life treatment routes.



Scaling Factor Table

For EPDs with product groups, an impact assessment was completed for each product, and the highest impacts were reported as representations of the product group. The rest of the products in the group are represented through scaling factor tables and can be independently calculated for the results based on CML method.

The table below presents the scaling factors for the TENIO-SKG Cable gel sealing product group. To determine the impact results for these products, multiply the respective scaling factors by the LCA results provided in the Maximum Impact section. This approach ensures consistent and transparent calculation of environmental impacts across all products in the group.

	TENIO-SKG5-2/4	TENIO-SKG4-3/6	TENIO-SKG3-5/8	TENIO-SKG3-7/10	TENIO-SKG2-9/12
Impact category	Total	Total	Total	Total	Total
Abiotic depletion	1	1.018	0.981	0.981	0.933
Abiotic depletion (fossil fuels)	1	1.015	0.977	0.977	0.927
Global warming (GWP100a)	1	1.014	0.984	0.984	0.946
Ozone layer depletion (ODP)	1	0.952	0.933	0.933	0.860
Photochemical oxidation	1	1.014	0.979	0.979	0.933
Acidification	1	1.012	0.978	0.978	0.930
Eutrophication	1	1.008	0.992	0.992	0.971

	TENIO-SKG2-11/14	TENIO-SKG2-13/16	TENIO-SKG3-3/5X6/9	TENIO-SKG-DUMMY
Impact category	Total	Total	Total	Total
Abiotic depletion	0.924	0.923	0.967	0.597
Abiotic depletion (fossil fuels)	0.913	0.908	0.965	0.621
Global warming (GWP100a)	0.938	0.938	0.973	0.623
Ozone layer depletion (ODP)	0.787	0.712	0.964	1.058
Photochemical oxidation	0.920	0.916	0.958	0.603
Acidification	0.916	0.910	0.968	0.634
Eutrophication	0.967	0.967	0.985	0.665

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/>

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- Contact Corporate Responsibility & Sustainability team for sustainability questions at sustainability@commscope.com

LCA Practitioner

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