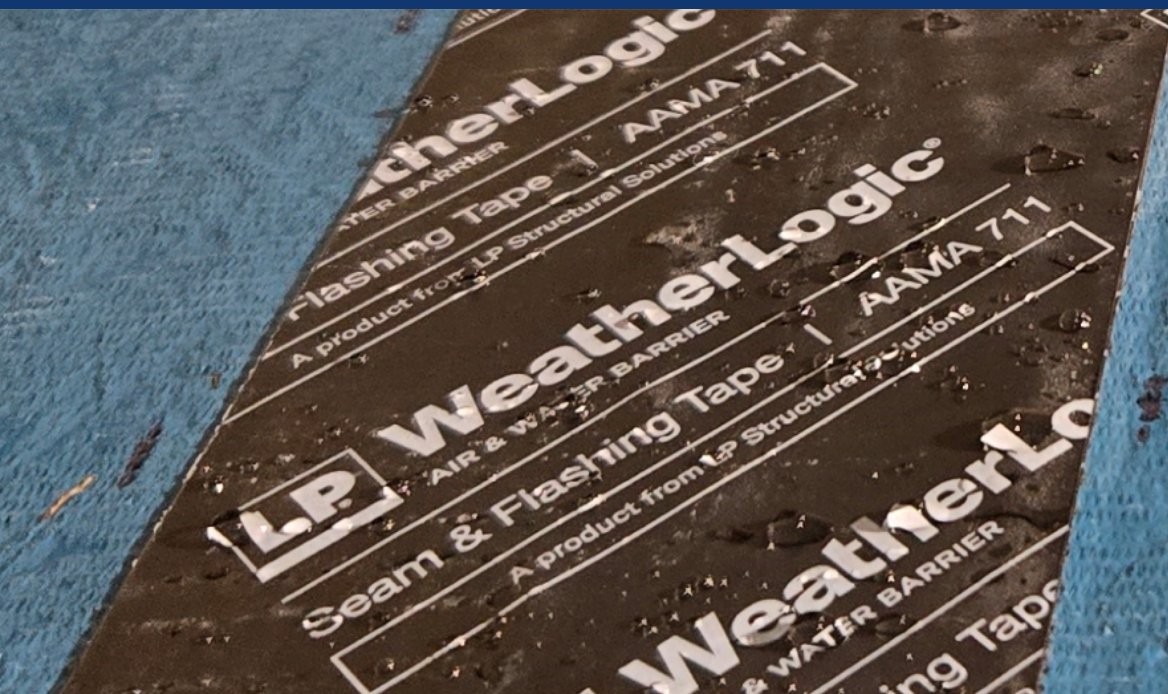


# ENVIRONMENTAL PRODUCT DECLARATION

IN ACCORDANCE WITH ISO 14025 AND ISO 21930:2017

SmartEPD-2025-088-0611-01.1

## LP WeatherLogic® Seam & Flashing Tape



**LP WeatherLogic®**  
AIR & WATER BARRIER



Date of Issue:  
Oct 01, 2025

Expiration:  
Oct 01, 2030

Last updated:  
Nov 13, 2025



General Information

Louisiana-Pacific Corporation

 Louisiana-Pacific Corporation 1610 West End Ave. Suite 200, Nashville, TN 37203

 615-986-5792

 email@lpcorp.com  [LPCorp.com](https://www.lpcorp.com)



|                             |                                                       |
|-----------------------------|-------------------------------------------------------|
| Product Name:               | LP WeatherLogic® Seam & Flashing Tape                 |
| Declared Unit:              | 1 m with a width of 0.0953 m                          |
| Declaration Number:         | SmartEPD-2025-088-0611-01.1                           |
| Date of Issue:              | October 01, 2025                                      |
| Expiration:                 | October 01, 2030                                      |
| Last updated:               | November 13, 2025                                     |
| EPD Scope:                  | Cradle to gate with other options<br>A1 - A3, C1 - C4 |
| Market(s) of Applicability: | North America                                         |

General Organization Information

As a leader in high-performance building solutions, Louisiana-Pacific Corporation (LP Building Solutions, NYSE: LPX) manufactures engineered wood products that meet the demands of builders, remodelers and homeowners worldwide. LP’s extensive portfolio of innovative and dependable products includes Siding Solutions (LP® SmartSide® Trim & Siding, LP® SmartSide® ExpertFinish® Trim & Siding, LP BuilderSeries® Lap Siding and LP® Outdoor Building Solutions®), LP® Structural Solutions (LP® TechShield® Radiant Barrier, LP WeatherLogic® Air & Water Barrier, LP Legacy® Premium Sub-Flooring, LP® FlameBlock® Fire-Rated Sheathing, and LP® TopNotch® 350 Durable Sub-Flooring) and oriented strand board (OSB). In addition to product solutions, LP provides industry-leading customer service and warranties. Since its founding in 1972, LP has been Building a Better World by helping customers construct beautiful, durable homes while shareholders build lasting value. Headquartered in Nashville, Tennessee, LP operates 22 plants across the U.S., Canada, Chile and Brazil. For more information visit [LPCORP.COM](https://www.lpcorp.com).

Further information can be found at: [LPCorp.com](https://www.lpcorp.com)

Limitations, Liability, and Ownership

Environmental declarations from different programs (ISO 14025) may not be comparable. Comparison of the environmental performance of products using EPD information shall be based on the product’s use and impacts at the building level, and therefore EPDs may not be used for comparability purposes when not considering the whole building life cycle. EPD comparability is only possible when all stages of a life cycle have been considered. However, variations and deviations are possible. Example of variations: Different LCA software and background LCI datasets may lead to differences results for upstream or downstream of the life cycle stages declared. The EPD owner has sole ownership, liability, and responsibility for the EPD.

The environmental impact results of products in this document are based on a declared unit and therefore do not provide sufficient information to establish comparisons. The results shall not be used for comparisons without knowledge of how the physical properties of the product impact the precise function at the construction level. The environmental impact results shall be converted to a functional unit basis before any comparison is attempted.

A manufacturer shall not make claims based on an industry-average EPD which leads the market to believe the industry-average is representative of manufacturer-specific or product-specific results.

Reference Standards

|                                |                                                                                                                                                                                          |
|--------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Standard(s):                   | ISO 14025 and ISO 21930:2017                                                                                                                                                             |
| Core PCR:                      | Smart EPD® Part A Product Category Rules for Building and Construction Products and Services, 1000, v1.1<br>Date of issue: January 15, 2025                                              |
| Sub-category PCR:              | Smart EPD® Part B PCR for Plastic and Elastomer Roofing and Sealing Sheet Systems, 1000-005, v1 (adapted from IBU)<br>Date of issue: February 26, 2025<br>Valid until: February 26, 2028 |
| Sub-category PCR review panel: |  Contact Smart EPD for more information.                                                                |
| General Program Instructions:  |  Smart EPD General Program Instructions v.1.0, November 2022                                            |

## Verification Information

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| LCA Author/Creator:   |  Olivia Fritz    TrueNorth Collective LLC    olivia.fritz@truenorthcollective.net                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| EPD Program Operator: |  Smart EPD    info@smartepd.com    www.smartepd.com  <br> 585 Grove St., Ste. 145, Herndon, VA 20170, USA                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Verification:         | Independent critical review of the LCA and data, according to ISO 14044 and ISO 14071:  Vijay Thakur    Individual Verifier    thakur.vijay3011@gmail.com <span>External</span><br>Independent external verification of EPD, according to ISO 14025 and reference PCR(s):  Vijay Thakur    Individual Verifier    thakur.vijay3011@gmail.com <span>External</span> |

## Product Information

|                                       |                                                                                                                                                                                                             |
|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Declared Unit:                        | 1 m with a width of 0.0953 m                                                                                                                                                                                |
| Mass:                                 | 0.04412 kg                                                                                                                                                                                                  |
| Product Specificity:                  |  Product Average<br> Product Specific |
| Supply Chain Specific Data:           | 0 %                                                                                                                                                                                                         |
| Variation in GWP Result (Products):   | -1.37% to +1.09%                                                                                                                                                                                            |
| Variation in GWP Result (Facilities): | 0% to 0%                                                                                                                                                                                                    |

## Product Description

The LP WeatherLogic® Seam & Flashing Tape is a critical component of the LP WeatherLogic® Air & Water Barrier system. This tape is used to both seal seams and for flashing purposes and helps prevent the infiltration of water into the home. The tape also helps to create a tighter and more energy-efficient home.

Further information can be found at: [LPCorp.com](https://www.LPCorp.com)

## Product Specifications

|                                          |                                                                       |
|------------------------------------------|-----------------------------------------------------------------------|
| <b>Product SKU(s):</b>                   | LP WeatherLogic® Seam & Flashing Tape 3-3/4" (self-wound), 6" (lined) |
| <b>Product Classification Codes:</b>     | EC3 - ThermalMoistureProtection -> MembraneRoofing                    |
| <b>Roof Sheeting Type:</b>               | Self-adhesive                                                         |
| <b>Sealing method options:</b>           | Other (specify)                                                       |
| <b>Other sealing method:</b>             | Joining with seaming tape                                             |
| <b>Reference ground surface options:</b> | Other (specify)                                                       |

## Material Composition

| Material/Component Category              | Origin                   | % Mass |
|------------------------------------------|--------------------------|--------|
| Polyethylene backing                     | United States of America | 39.58  |
| Polyethylene terephthalate release liner | United States of America | 15.11  |
| Acrylic ester resin                      | Germany                  | 38.52  |
| Plasticizer                              | China                    | 6.8    |

| Packaging Material      | Origin                          | kg Mass  |
|-------------------------|---------------------------------|----------|
| Corrugated Carton       | Lincolnton, North Carolina, USA | 0.003393 |
| Polyvinyl chloride film | Hickory, North Carolina, USA    | 0.000065 |
| Adhesive Paper Label    | Asheboro, North Carolina, USA   | 0.000043 |
| Paper Core              | Hickory, North Carolina, USA    | 0.001024 |
| Silicone Coater Paper   | Tabor City, North Carolina, USA | 0        |

| Biogenic Carbon Content                           | kg C per m |
|---------------------------------------------------|------------|
| Biogenic carbon content in product                | None       |
| Biogenic carbon content in accompanying packaging | 0.002208   |

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

## EPD Data Specificity

Primary Data Year:

June 2023 - June 2024

Manufacturing Specificity:

✗ Industry Average

✓ Manufacturer Average

✗ Facility Specific

Averaging:

Averaging was conducted based on the weighted average of the two seaming tape products. Production volume of each tape was utilized as the weights in the weighted average.

## System Boundary

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

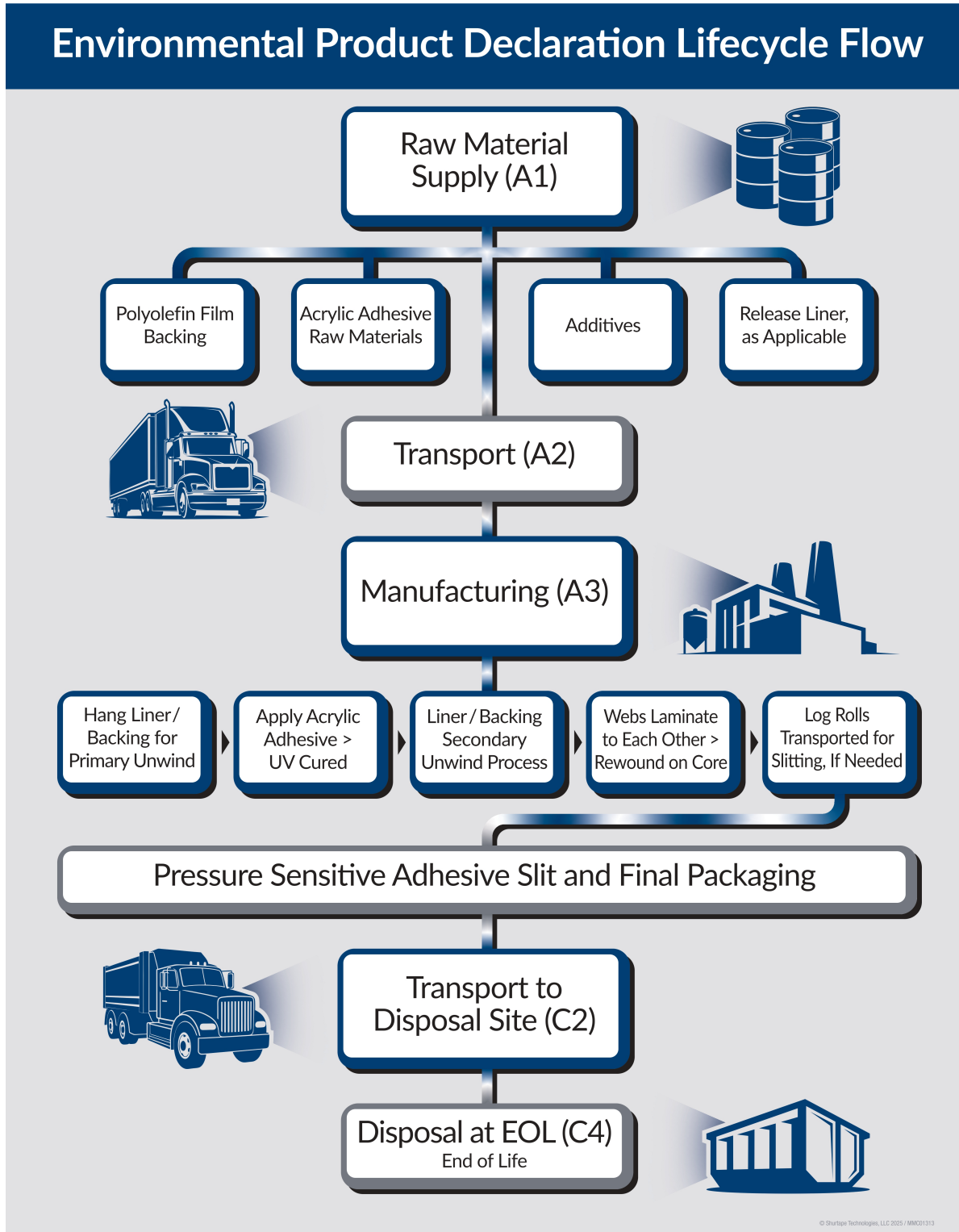
Note:

ND = Module not declared

Plants

-  R&D Facility  
1625 Highland Ave NE, Hickory, NC 28601, USA
-  Plant 30 Distribution Center  
3422 Catawba Industrial Pl, Catawba, NC 28609, USA
-  Plant 27 Product Slitting Center  
3422 Catawba Industrial Pl, Catawba, NC 28609, USA

## Product Flow Diagram



Software and Database

|                             |                                                                                                     |
|-----------------------------|-----------------------------------------------------------------------------------------------------|
| LCA Software:               |  SimaPro v. 10.2   |
| LCI Foreground Database(s): |  Ecoinvent v. 3.10 |
| LCI Background Database(s): |  Ecoinvent v. 3.10 |

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

- Data quality is assessed with respect to the following criteria. Some criteria affect foreground data collection, some affect background data sources, and some affect both foreground and background data.
- Time-related coverage: According to the PCR, foreground data shall not be more than 5 years old and shall be collected and averaged over a period of at least 1 year. Secondary data shall be less than 10 years old. Foreground data supplied by the primary manufacturer is from June 2023 - June 2024.
  - Geographical coverage: LCA data for this study is gathered for all primary manufacturing locations included in the EPD. All facilities pertaining to this study are in North Carolina, USA.
  - Technology coverage: LCA data for this study is gathered for all primary manufacturing locations included in the EPD.
  - Completeness: Generic data should be checked for plausibility (e.g., by mass balance, energy balance, comparison of indicators to those of datasets reviewed or verified according to this standard, or comparison of flows or indicators to other relevant sources of information).
  - Representativeness: Background datasets are assessed following the guidance for Assessing Data Quality of Background Life Cycle Inventory (LCI) Datasets published by the ACLCA in 2022. Datasets for which the desired data quality indicated in the guide is not achieved are identified and the chosen alternative is justified.
  - Consistency: To ensure consistency, primary data is collected at the same level of granularity for all products and plants.
  - Reproducibility: All input and output information, modelling assumptions and dataset choices are provided in this report for the purpose of reproducibility.
  - Sources of the data: Per the PCR, EPDs representing a specific product shall be calculated using primary, specific data for the processes under operational control by the declaring manufacturer. As a rule, consistent background data should be used to ensure comparability of results. A list of acceptable background databases was not provided in the PCR.
  - Uncertainty of the information (e.g. data, models, and assumptions): The enhanced pedigree matrix from the guidance for Assessing Data Quality of Background Life Cycle Inventory (LCI) Datasets is adopted for assessment of potential sources of uncertainty in the data. All assumptions shall be documented without bias according to ISO 21930.

| Table 11: Data Disclosure Table |                         |                                                                                                                       |                       |                         |              |           |
|---------------------------------|-------------------------|-----------------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------|--------------|-----------|
| Material / Process Category     | Material / Process Name | Inventory Database Name                                                                                               | Material / Process ID | Reporting Period / Year | Assessment   | Reference |
| Material Product                | A1 Sealing              | Plastic bagging film, low density polyethylene (LLDPE) marked for agricultural film, low density polyethylene (LLDPE) | 000                   | 2011-2023               | Exhaustive 1 |           |
|                                 | A1 Other                | Painted for polyethylene terephthalate, granulate, polyethylene (PE)                                                  | 000                   | 2011-2023               | Exhaustive 1 |           |
|                                 |                         | Plastic bagging film, low density polyethylene (LLDPE) marked for agricultural film, low density polyethylene (LLDPE) | 000                   | 2011-2023               | Exhaustive 1 |           |
|                                 | A1 Packaging            | Uncoated polyethylene (PE) marked for agricultural film, low density polyethylene (LLDPE)                             | 000                   | 2011-2023               | Exhaustive 1 |           |
|                                 | A1 Adhesive Resin       | Uncoated polyethylene (PE) marked for agricultural film, low density polyethylene (LLDPE)                             | 000                   | 2011-2023               | Exhaustive 1 |           |
|                                 | A1 Composite Carrier    | Composite carrier (PE) marked for agricultural film, low density polyethylene (LLDPE)                                 | 000                   | 2011-2023               | Exhaustive 1 |           |
| Transportation                  | A2 Road                 | Transport, freight road (TMR) marked for transport, freight road (TMR)                                                | 000                   | 2011-2023               | Exhaustive 1 |           |
|                                 | A2 Sea                  | Transport, freight sea (TMR) marked for transport, freight sea (TMR)                                                  | 000                   | 2011-2023               | Exhaustive 1 |           |
|                                 | A2 Air                  | Transport, freight air (TMR) marked for transport, freight air (TMR)                                                  | 000                   | 2011-2023               | Exhaustive 1 |           |
| Energy                          | A3 Electricity          | Electricity, medium voltage (0.1-100 kV) marked for electricity, medium voltage (0.1-100 kV)                          | 000                   | 2011-2023               | Exhaustive 1 |           |
|                                 | A3 Heat                 | Heat, medium temperature (100-200 °C) marked for heat, medium temperature (100-200 °C)                                | 000                   | 2011-2023               | Exhaustive 1 |           |
| Waste                           | A4 Landfill or other    | Landfill or other (Waste) marked for landfill or other (Waste)                                                        | 000                   | 2011-2023               | Exhaustive 1 |           |
|                                 | A4 Incineration         | Incineration (Waste) marked for incineration (Waste)                                                                  | 000                   | 2011-2023               | Exhaustive 1 |           |

Life Cycle Module Descriptions

The life cycles of seaming tape products begin with raw material extraction and processing (A1). Tape components are sourced from numerous international and domestic suppliers and are transported to the manufacturing locations in North Carolina (A2). During manufacturing (A3) materials are sent through a coater, where the paper and backing are merged. Curing and crosslinking occurs through ultraviolet light (A3). Next, the tape is rolled into large rolls of length 1,500 2000 yards and a width of 60 inches (A3). After transport to a separate facility, the tape rolls are slit to convert to appropriate consumer packaging (A3). Installation at site is excluded from this study as it requires no material or energy inputs (A4-5). The use phase is excluded from this study as seaming tape installation requires no maintenance and has a reference service life equal to that of the entire building (B1-B7). When the building is dismantled, the tape is transported to the assumed end of life scenario of landfilling (C2,C4).

LCA Discussion

Allocation Procedure

The inputs and outputs to the manufacturing plant are allocated per the stepwise method detailed in ISO 21930, Section 7.2.4, 7.2.5, and 7.2.6. Most manufacturing inputs and outputs are product-agnostic and are intensities based on area of tape produced at each manufacturing step. Intensities per area of tape were converted to be per meter of tape. Proportion of inputs and outputs allocated to in-scope products were primarily assigned based on total production volume of in-scope versus out-of-scope products. For some inputs and outputs, allocation was assigned based on square footage of production lines or of total facilities. Subdivision for product and packaging raw material inputs is possible through product BOMs. Allocation of secondary data taken from ecoinvent v3.10 cut-off by classification has allocation applied.

Cut-off Procedure

This study uses the cut-off approach method for recycling. According to this approach, the first life of a material bears the environmental burdens of its production (e.g., raw material extraction and processing) and the second life (e.g., scrap input) bears the burdens of refurbishment (e.g., collection and refining of scrap). The burdens from waste treatment are taken on by the next life of the product and not included in this study.

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

End of Life (C1 - C4)  
C1 - C4 Modules

Collection Process

|                                          |            |
|------------------------------------------|------------|
| Collected Separately:                    | 0 kg       |
| Collected with Mixed Construction Waste: | 0.04412 kg |

Recovery

|                                    |            |
|------------------------------------|------------|
| Reuse:                             | 0 kg       |
| Recycling:                         | 0 kg       |
| Landfill:                          | 0.04412 kg |
| Incineration:                      | 0 kg       |
| Incineration with Energy Recovery: | 0 kg       |
| Energy Conversion:                 | 0 kg       |

Disposal

|                                         |            |
|-----------------------------------------|------------|
| Product or Material for Final Disposal: | 0.04412 kg |
|-----------------------------------------|------------|

Assumptions for scenario development:

Transportation at the end of life was assumed to be 32 km for all waste types per the US EPA WARM Model ( U.S. Environmental Protection Agency, 2020). All seaming tape is assumed to be landfilled at end of life and is considered non-hazardous waste.

## Results

### Environmental Impact Assessment Results

IPCC AR5 GWP 100, TRACI 2.2, CML 2016 v4.8

per 1 m of product with a width of 0.0953 m.

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

| Impact Category | Method           | Unit         | A1       | A2       | A3       | A1A2A3   | C1 | C2       | C3 | C4       |
|-----------------|------------------|--------------|----------|----------|----------|----------|----|----------|----|----------|
| GWP-total       | IPCC AR5 GWP 100 | kg CO2 eq    | 2.60e-1  | 1.82e-2  | 2.63e-2  | 3.04e-1  | 0  | 2.77e-4  | 0  | 4.12e-3  |
| ODP             | TRACI 2.2        | kg CFC 11 eq | 3.37e-10 | 6.66e-12 | 1.17e-10 | 4.61e-10 | 0  | 1.07e-13 | 0  | 3.66e-13 |
| AP              | TRACI 2.2        | kg SO2 eq    | 9.19e-4  | 1.39e-4  | 5.14e-5  | 1.11e-3  | 0  | 1.43e-6  | 0  | 3.60e-6  |
| EP              | TRACI 2.2        | kg N eq      | 9.78e-5  | 2.85e-5  | 3.11e-5  | 1.57e-4  | 0  | 3.39e-7  | 0  | 4.67e-5  |
| POCP            | TRACI 2.2        | kg O3 eq     | 1.30e-2  | 3.37e-3  | 8.37e-4  | 1.72e-2  | 0  | 4.03e-5  | 0  | 8.51e-5  |
| ADP-fossil      | CML 2016 v4.8    | MJ           | 4.98e+0  | 2.48e-1  | 1.79e-1  | 5.41e+0  | 0  | 3.85e-3  | 0  | 1.09e-2  |
| GWP-fossil      | IPCC AR5 GWP 100 | kg CO2 eq    | 1.69e-4  | 2.86e-6  | 1.09e-2  | 1.11e-2  | 0  | 4.28e-8  | 0  | 2.73e-6  |
| GWP-biogenic    | IPCC AR5 GWP 100 | kg CO2 eq    | 2.60e-1  | 1.82e-2  | 1.53e-2  | 2.93e-1  | 0  | 2.76e-4  | 0  | 4.12e-3  |
| GWP-luluc       | IPCC AR5 GWP 100 | kg CO2 eq    | 2.04e-4  | 7.73e-6  | 3.85e-5  | 2.50e-4  | 0  | 1.10e-7  | 0  | 2.95e-7  |
| ADP-fossil      | TRACI 2.2        | MJ           | ND       | ND       | ND       | ND       | ND | ND       | ND | ND       |

**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 = Particulate 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.

The contribution analysis indicates that between 48% to 84% of impacts occur because of raw material supply (A1). Manufacturing (A3) also contributes from 5% to 25% to impacts. EP, however, is also driven by transportation of materials (A2) and end of life disposal of products (C4).

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

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, 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.

## Resource Use Indicators

per 1 m of product with a width of 0.0953 m.

| Indicator | Unit                    | A1      | A2      | A3       | A1A2A3  | C1 | C2      | C3 | C4       |
|-----------|-------------------------|---------|---------|----------|---------|----|---------|----|----------|
| PERE      | MJ, net calorific value | 2.20e-1 | 3.45e-3 | 8.19e-2  | 3.05e-1 | 0  | 5.09e-5 | 0  | 1.77e-4  |
| PERM      | MJ, net calorific value | 0       | 0       | 0        | 0       | 0  | 0       | 0  | 0        |
| PERT      | MJ, net calorific value | 2.20e-1 | 3.45e-3 | 8.19e-2  | 3.05e-1 | 0  | 5.09e-5 | 0  | 1.77e-4  |
| PENRE     | MJ, net calorific value | 4.53e+0 | 2.67e-1 | 2.43e-1  | 5.04e+0 | 0  | 4.15e-3 | 0  | 1.18e-2  |
| PENRM     | MJ, net calorific value | 1.06e+0 | 0       | 1.36e-3  | 1.06e+0 | 0  | 0       | 0  | 0        |
| PENRT     | MJ, net calorific value | 5.59e+0 | 2.67e-1 | 2.44e-1  | 6.10e+0 | 0  | 4.15e-3 | 0  | 1.18e-2  |
| SM        | kg                      | 0       | 0       | 0        | 0       | 0  | 0       | 0  | 0        |
| RSF       | MJ, net calorific value | 0       | 0       | 0        | 0       | 0  | 0       | 0  | 0        |
| NRSF      | MJ, net calorific value | 0       | 0       | 0        | 0       | 0  | 0       | 0  | 0        |
| RE        | MJ                      | 0       | 0       | 0        | 0       | 0  | 0       | 0  | 0        |
| FW        | m3                      | 2.12e-3 | 3.31e-5 | -2.15e-5 | 2.13e-3 | 0  | 5.18e-7 | 0  | -1.63e-4 |

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, NRPRM or PENRM = 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.

## Waste and Output Flow Indicators

per 1 m of product with a width of 0.0953 m.

| Indicator | Unit | A1 | A2 | A3      | A1A2A3  | C1 | C2 | C3 | C4      |
|-----------|------|----|----|---------|---------|----|----|----|---------|
| HWD       | kg   | 0  | 0  | 0       | 0       | 0  | 0  | 0  | 0       |
| NHWD      | kg   | 0  | 0  | 3.42e-2 | 3.42e-2 | 0  | 0  | 0  | 4.41e-2 |
| RWD       | kg   | 0  | 0  | 0       | 0       | 0  | 0  | 0  | 0       |
| CRU       | kg   | 0  | 0  | 0       | 0       | 0  | 0  | 0  | 0       |
| MFR       | kg   | 0  | 0  | 0       | 0       | 0  | 0  | 0  | 0       |
| MER       | kg   | 0  | 0  | 0       | 0       | 0  | 0  | 0  | 0       |
| EEE       | MJ   | 0  | 0  | 0       | 0       | 0  | 0  | 0  | 0       |
| EET       | MJ   | 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.

## Carbon Emissions and Removals

per 1 m of product with a width of 0.0953 m.

| Indicator | Unit   | A1 | A2 | A3      | A1A2A3  | C1 | C2 | C3 | C4      |
|-----------|--------|----|----|---------|---------|----|----|----|---------|
| BCRP      | kg CO2 | 0  | 0  | 0       | 0       | 0  | 0  | 0  | 0       |
| BCEP      | kg CO2 | 0  | 0  | 0       | 0       | 0  | 0  | 0  | 0       |
| BCRK      | kg CO2 | 0  | 0  | 6.31e-3 | 6.31e-3 | 0  | 0  | 0  | 4.02e-3 |
| BCEK      | kg CO2 | 0  | 0  | 9.39e-5 | 9.39e-5 | 0  | 0  | 0  | 2.20e-3 |
| BCEW      | kg CO2 | 0  | 0  | 0       | 0       | 0  | 0  | 0  | 0       |
| CCE       | kg CO2 | 0  | 0  | 0       | 0       | 0  | 0  | 0  | 0       |
| CCR       | kg CO2 | 0  | 0  | 0       | 0       | 0  | 0  | 0  | 0       |
| CWNR      | kg CO2 | 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:

BCRP = Biogenic Carbon Removal from Product, BCEP = Biogenic Carbon Emission from Product, BCRK = Biogenic Carbon Removal from Packaging, BCEK = Biogenic Carbon Emission from Packaging, BCEW = Biogenic Carbon Emission from Combustion of Waste from Renewable Sources Used in Production Processes, CCE = Calcination Carbon Emissions, CCR = Carbonation Carbon Removals, CWNR = Carbon Emissions from Combustion of Waste from Non-Renewable Sources used in Production Processes, GWP-luc = Carbon Emissions from Land-use Change.

Per PCR guidelines, installation of products was an optional module and excluded from this study. However, as biogenic carbon removals associated with packaging have been allocated to A3, biogenic carbon emissions have been allocated to C4 other than the excess carton associated with manufacturing that is disposed with other manufacturing waste directly to landfill. The remaining biogenic carbon emissions follow the packaging disposal assumptions as stated in the PCR.

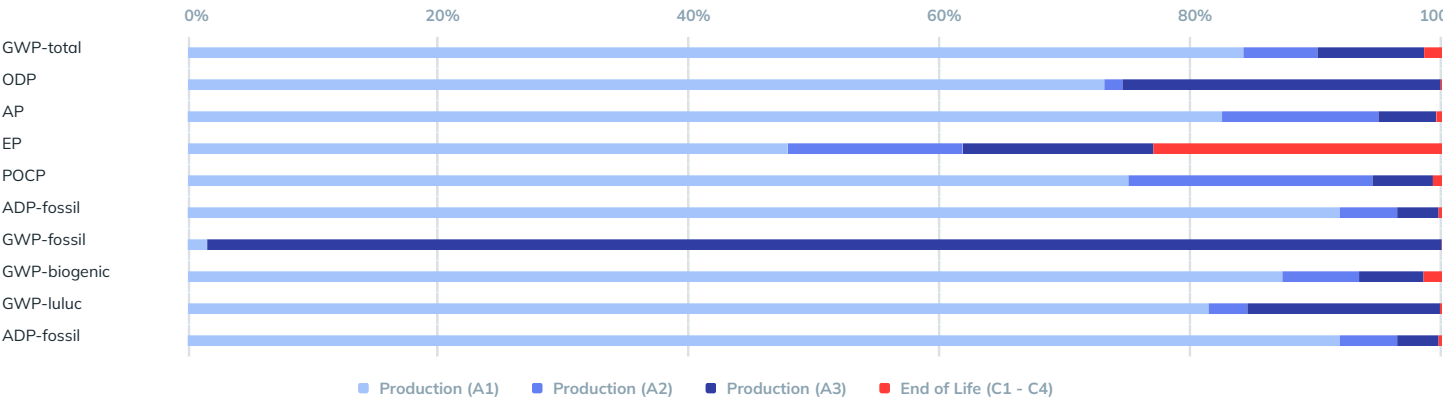
## Impact Scaling Factors

| Product Name and/or Product Attribute | Product Specific Functional/Declared Unit Multiplier |
|---------------------------------------|------------------------------------------------------|
| Width of 4 in                         | 1.067                                                |
| Width of 10 in                        | 2.667                                                |

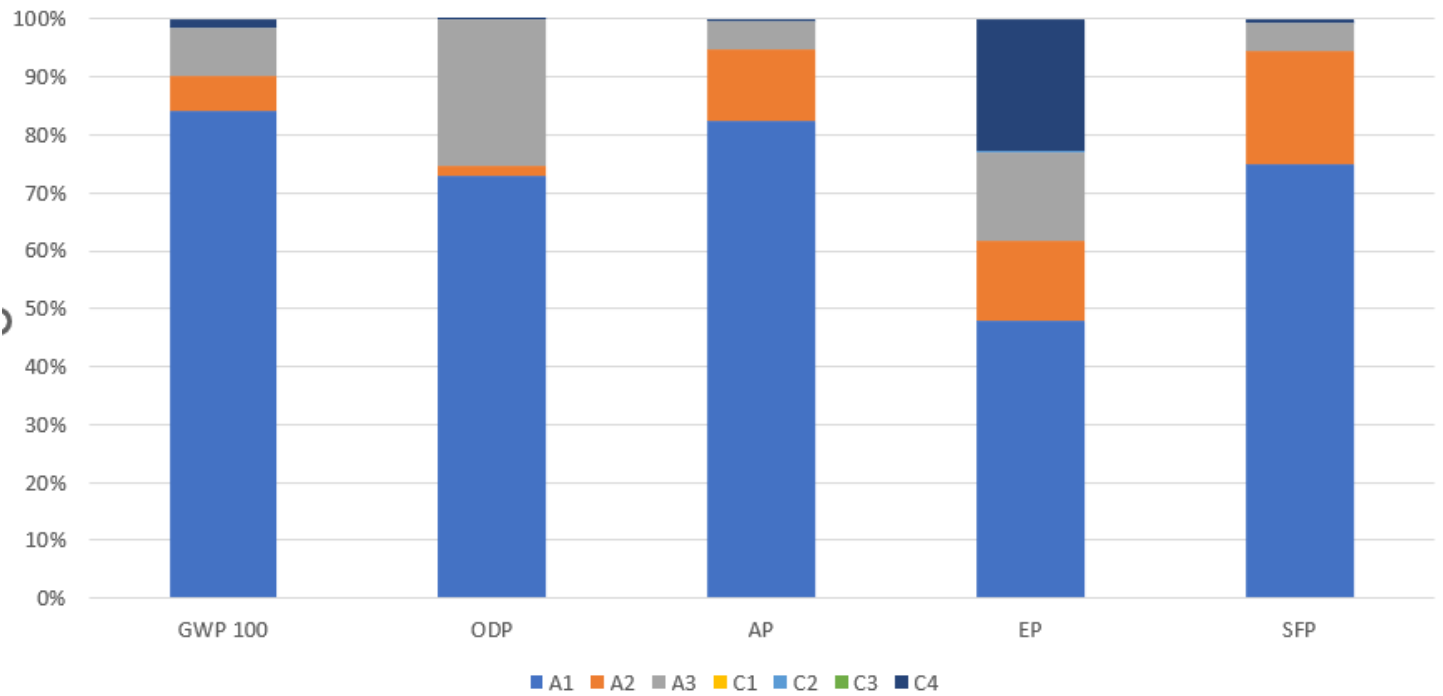
The PCR specifies a declared unit of 1 linear meter for tapes. The product with the highest sales was selected as the representative product. As the results of the LCIA are specified to the declared unit one meter with a set width of 0.0953 meters, scaling factors (a multiplier) are provided to linearly extrapolate the LCIA results to the widths of sold products. The scaling factor is equivalent to the product width divided by the set width of the reference product. The scaling factor can be multiplied by EPD results to determine results for the generic black tape at a specific width. Scaling factors are provided for different possible tape widths. Results may be further extrapolated to a required length of tape for the EPD user, simply by multiplying by the desired length of tape.

## Interpretation

For seaming tape products analyzed in this study raw material supply (A1), contributes to 48% - 84% of potential impacts, depending on the product and Impact type. Raw material supply contributes to 84% of global warming potential and to 82% of acidification potential across all six seaming tapes. Manufacturing contributes between 5% to 25% of impacts, with the highest contribution of 25% to ozone depletion potential. Potential environmental impacts from end-of-life stages for all products were the least significant contributors, aside from eutrophication (23%). For seaming tape product studied, the global warming potential impacts were largely driven by raw material use, especially methyl acrylate (MA), a proxy for an acrylic resin used in the tapes. The use of PE and PET also contribute significantly to impacts due to raw material supply. LCA results are based on a relative approach and indicate potential environmental effects therefore do not predict actual impacts on category impacts.



Contribution Results (TRACI 2.2)



Additional Environmental Information

## Further Information

### Disclaimer

Much of the data utilized for this Environmental Product Declaration is based on information supplied by the manufacturer. TrueNorth Collective is not responsible for the accuracy, completeness, or reliability of the data provided by the manufacturer or any information or conclusions derived therefrom.

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