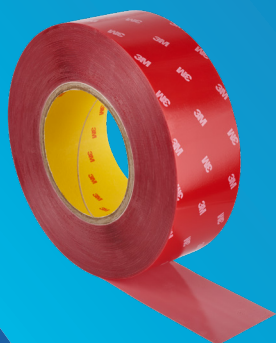




Environmental product declaration



in accordance with ISO 14025 and EN 15804+A1 for:

3M™ Flexible Air Sealing Tape FAST-D 8069E

FAST-D 8069E Seal Hold Tape 50 mm x 25 m specialty
FAST-D 8069E Seal Hold Tape 50 mm x 25 m



Contents

1	Programme Information	4
2	Company Information	5
3	Product Information	8
3.1	Product description	8
3.2	Content declaration	10
3.2.1	Product composition	10
3.2.2	Packaging	10
3.2.3	Recycling	12
3.3	Manufacturing	12
4	Life Cycle Assessment	13
4.1	Declared unit	13
4.2	System boundaries	13
4.2.1	Product stage (A1-A3)	13
4.2.2	Downstream processes (A4-A5, B1-B7, C1-C4)	13
4.2.3	Resource recovery stage (D)	13
4.2.4	Flow diagram	15
4.3	Data collection and quality	15
4.4	Calculation procedure	15
5	Environmental Performance	16
5.1	Potential environmental impact	16
5.2	Use of resources	17
5.3	Output flows and waste categories	17
5.4	Release of dangerous substances during the use stage	17
6	Additional Information	18
6.1	Other environmental information	18
6.1.1	LCA results interpretation	18
6.1.2	Uncertainty on the environment indicators	19
6.2	Social and economic aspects	19
6.3	Validity of the EPD and changes versus previous version	19
6.4	Acronyms	20
6.5	Variation ranges	23
6.6	References	23

1 Programme Information

EPD operator	EPD International AB (info@environdec.com) Box 210 60, SE-100 31 Stockholm, Sweden
Product Category Rules (PCRs)	EN 15804:2012+A1:2013 - Sustainability of construction works - Environmental Product Declarations - Core rules for the product category of construction products PCR 2012:01 v2.31 - Construction Products and Construction Services in accordance with ISO 14025 (Multiple CPC codes, date: 2019-12-20, valid until: 2020-09-01)
Generic PCR review conducted by	The Technical Committee of the International EPD® System. Chair: Massimo Marino (info@environdec.com)
Comparisons of EPD	EPD of construction products may not be comparable if they do not comply with EN 15804. Environmental product declarations within the same product category from different programs may not be comparable.
Independent Verification	<input type="checkbox"/> EPD verification <input checked="" type="checkbox"/> EPD process certification
Verified and approved by	SGS Italia S.p.A. Via Caldera, 21, Milan 20153, Italy Accredited by ACCREDIA Accreditation number DAP N° 006H Certificate N. IT14/0823
Data follow-up	Procedure for follow-up of data during EPD validity involves third-party verifier: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Goal of the study	A cradle-to-gate LCA study has been conducted in accordance with ISO 14040:2006 and ISO 14044:2006 and the requirements stated in the General Programme Instructions by The International EPD® System, and abovementioned PCRs. The goal of the LCA study is to assess the potential environmental impact for the product family of 3M™ 8069E FAST-D Seal Hold Tape 50 mm range which is represented by reference product FAST-D 8069E Seal Hold Tape 50 mm x 25 m specialty (7100087076) in this EPD.
Disclaimer	The owner of the EPD is 3M. All values provided in this EPD are a direct result from the use of characterisation factors and calculation rules as defined in the GaBi™ software from thinkstep GmbH, a sphera™ company and the requirements of the product category rules as mentioned above. For more information about this EPD or its contents, contact Jonas Depelchin, EPD publisher and process owner, at jdepelchin@mmm.com.

2 Company Information

Over the last century 3M has grown into a global powerhouse, developing products that improve lives around the world. It began life as a small-scale mining venture in Northern Minnesota back in 1902, then named Minnesota Mining and Manufacturing Company.

3M's success and longevity weren't apparent from the start. Our five founders were looking for corundum, a mineral ideal for making sandpaper and grinding wheels. It turns out, what they thought was corundum was really a low-grade mineral. Despite the early setback they persevered with their operation, gained the trust of important investors and built up sales, giving birth to the spirit of innovation and collaboration that still shapes 3M today.

Over the following decades scientific, technical and marketing innovations produced success upon success, eventually making 3M a constant name on the Fortune 500 list. Today, more than 60,000 3M products are used in homes, businesses, schools, hospitals and other industries.

With operations employing over 96,000 employees in more than 70 countries, and products sold in nearly 200 countries, 3M is a diverse technology company with global sales in excess of \$30 billion. 3M's commitment to innovation is reflected by the 8,100 scientists working around the world. The company now has well over 117,000 patents in its name.

96,000
employees in
70
countries

over
117,
patents

8,100
scientists globally

over
\$30
billion global sales

3M brings solutions to different markets through four separate business groups, each one represents a core area of the company, with ideas and innovations shared between them. This collaborative approach has led to unexpected solutions by enabling designers to see problems from different perspectives.

Safety & Industrial is our biggest earning business group, with a vast range of products used in industrial production, electrical and safety markets. This includes automotive, bonding and protecting surfaces in construction, securing things together and developing lightweight parts to help reduce weight and increase efficiency, whilst protecting people at work, and enhancing visual and design communication.

Transportation & Electronics provides solutions for improving road safety and creating a more connected world, such as developing global telecommunications and power grids, restoring underground pipelines and

locating key underground infrastructure. It's known for integrating with customers to create innovative solutions and providing opportunities for energy conservation and generation.

Healthcare provides innovations which are pioneering medical advancements in hospitals, emergency rooms and dental clinics around the world. It features a range of products designed for preventing infections and protecting wounds, improving oral health and ensuring food quality.

And finally, Consumer business group features many of our most familiar products and brands, including Post-It®, Scotch® and Command™. It develops solutions to make life easier and more productive at home and in the office, such as simplifying communication, cleaning and protecting surfaces, making home improvement easy and inspiring hobbies, crafts and creativity.

At 3M, we innovate with purpose. We empower individuals to address issues they want to impact, and collaborate with our customers and communities to take on shared global challenges – bringing value to both our business and society as a whole. We call this purpose-driven business. It's an exciting path forward because we know that with creativity, collaboration and a shared sense of purpose, no problem is unsolvable. Working together, we can improve every life.

We look at sustainability in terms of shared global needs and the future of our business. As the population grows, particularly in emerging economies, challenges like energy availability and security, raw material scarcity, human health and safety, education, and development must be addressed to ensure people across the world can lead healthy, fulfilling lives. Every day, 3M innovations aim to tackle some of the world's most pressing areas of concern: raw materials; water; energy and climate; health and safety, and education and development.

Setting goals to drive sustainability progress is nothing new at 3M. We've been setting global environmental goals since 1990. A strong part of our company history, these goals have helped dramatically reduce our own environmental footprint and established us as a leader in environmental stewardship. 3M's iconic Pollution Prevention Pays (3P) programme has been running since 1975. The programme has prevented more than 2 million tons of pollutants and saved over \$2 billion based on aggregated data from the first year of each 3P project.

Over the last two decades, as 3M's revenues have doubled, we have reduced our greenhouse gas emissions by nearly 70%, and moved 35% of our manufacturing sites to zero waste. At the same time, we've intensified our focus on creating a range of innovative solutions that help our customers be more sustainable — from glass bubbles that enable lower vehicle weight and improved fuel economy, to films that make homes, businesses, and electronics more energy efficient. In 2019 alone, 3M Science helped our customers avoid 17 million metric tons of emissions, which is the equivalent of taking more than three million cars off the road.

Another initiative led by 3M is the Sustainability Value Commitment, which ensures that every new product made by 3M from 2019 onwards is manufactured with sustainability in mind. It commits our product developers to focus on reusability, recyclability, energy, waste, water savings, responsible sourcing, and/or renewable materials appropriate to the specific product, from the beginning to the end of each product's lifecycle.

Since February 2014, 3M has become a signatory of the United Nations Global Compact. While 3M has always acted in accordance with the core values represented by the Compact, we are proud to formalise our commitment to its 10 principles in the areas of human rights, labour, environmental and anti-corruption and to grow our partnership with the organisation.





3 Product Information

3.1 Product description

The following products are covered by this EPD:

Product name	Reference
FAST-D 8069E Seal Hold Tape 50 mm x 25 m specialty	7100087076/UU004246714
FAST-D 8069E Seal Hold Tape 50 mm x 25 m	7100100910/UU008043463

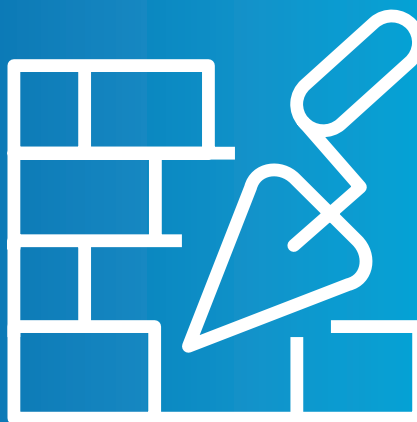
3M™ Flexible Air Sealing Tape FAST-D 8069E is a double-sided tape that conforms and seals over and around irregular surfaces. The proprietary acrylic adhesive sticks and stays stuck to a wide variety of difficult-to-stick-to surfaces, such as concrete, wood and plastic sheeting, anodized aluminium, galvanized metal, exterior gypsum and plywood without the use of any adhesion promoters. The liner is made from an easy-releasing, tear-resistant polyethylene polymer. Application temperatures may range from -18° C to 80° C. The tape is suited for splicing, installation, joining and sealing of construction foils and is made of polyethylene, which acts as water vapour barrier. Multilayer Elastomeric Film backing seals around nails and staples to prevent moisture intrusion. The product is available in different sizes and with different liners.

FAST-D 8069E Seal Hold Tape 50 mm x 25 m specialty (7100087076) is selected as main reference product because differences between the mandatory impact indicators compared to the other reference are lower than 10%. An overview of variation ranges between the references can be found in section 6.5.

As such, FAST-D 8069E Seal Hold Tape 50 mm x 25 m specialty will represent the other reference throughout the study. Differences between the references are related to the converting and packaging processes, e.g. different product dimensions and varying reference flows. The liner and film used are polyethylene-based for both.

3M FAST-D 8069E is classified under code 36920 (Self-adhesive plates, sheets, film, foil, tape, strip and other flat shapes, of plastics) in the United Nations Central Product Classification (CPC) System.

Depending on its application, the product covered by this Environmental Product Declaration can be considered a construction product as per the definition in European Regulation (EU) No 305/2011 laying down harmonised conditions for the marketing of construction products. This regulation defines construction products as “any product or kit which is produced and placed on the market for incorporation in a permanent manner in construction works or parts thereof and the performance of which has an effect on the performance of the construction works with respect to the basic requirements for construction works”. Consequently, PCR 2012:01 v2.31 and EN 15804:2012+A1:2013 apply. It is important to note that due to the absence of so-called harmonised technical specifications, the requirements for CE marking and declaration of performance as described in the same regulation do not apply.





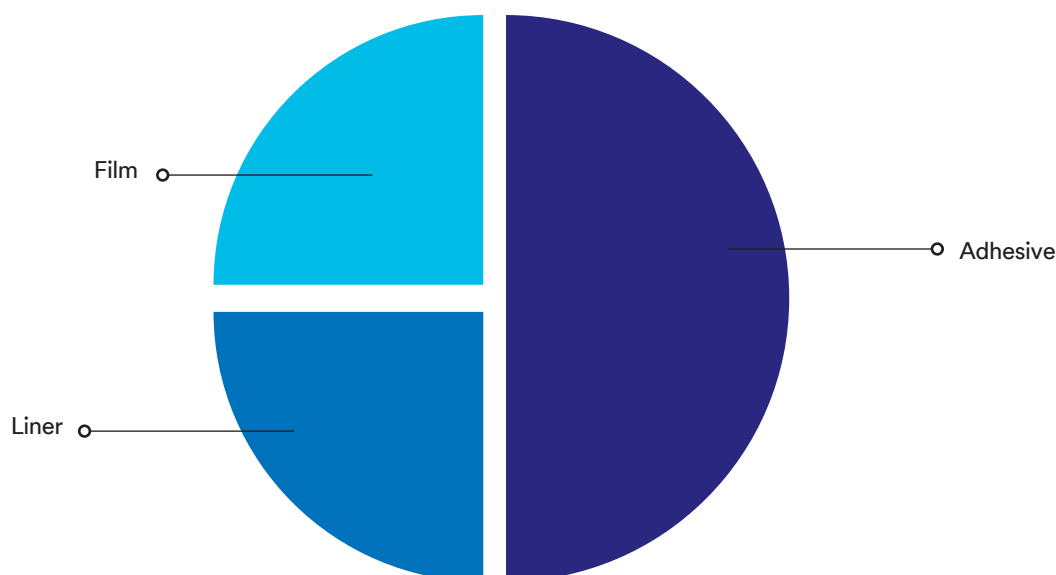
3.2 Content declaration

3.2.1 Product composition

3M FAST-D 8069E covered by this Environmental Product Declaration does not contain Substances of Very High Concern (SVHC) as defined by article 59 (10) of Regulation (CE) n° 1907/2006 (dated 2020-06-25), also known as the REACH candidate list, at a concentration

at or above 0.1% in weight. The table below reports the product composition. The pie chart at the bottom of the page gives the composition of 3M FAST-D 8069E.

Material	Weight %
Acrylic adhesive	50
Polyethylene film	25
Polyethylene liner	25



3.2.2 Packaging

The packaging materials of the included 3M FAST-D 8069E references are described in the table below. Values are given in kg for both the product and the packaging materials and relate to the declared unit.

All packaging materials are sourced externally and the products are packaged at 3M Wrocław (Poland). The products are unpacked at the construction site.

Dimensions	3M 8069E [kg]	Paper core [kg]	Corrugated paper sheet [kg]	Paper tube [kg]	Paper slotted container [kg]	Plastic wafer [kg]
50 mm x 25 m	0.495	0.016	0.0133	0.00292	0.0798	0.035
50 mm x 25 m specialty	0.495	0.016	0.0133	0.00292	0.0798	0.035



3.2.3 Recycling

3M has been recycling since 1975 when we established the Corporate Environmental Policy and adopted a voluntary Pollution Prevention Pays (3P) program based on the then-novel idea that pollution prevention is more environmentally effective, technically sound and economically advantageous than pollution control.

Today 3M practices responsible waste management at every company location to reduce the amount of waste materials generated, and deal with hazardous waste in the most efficient way possible.

Every location has a Waste Management Coordinator and is required to manage all returned, recycled and waste materials from the time of generation until reused, recycled, treated or disposed.

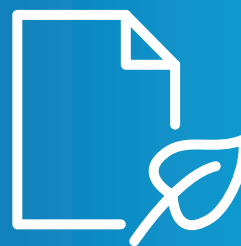
3.3 Manufacturing

At 3M, we approach our sustainability goals and strategy by delivering excellence in operations and across our supply chain, innovating to improve lives with our customers and partners, and enriching the communities where we live and work. Our ambition, working collaboratively, is to realise a world where every life is improved, where natural resources are reliably available, where people everywhere have access to education and opportunity, and where communities are safe, healthy, connected and thriving.

When it comes to fabrication, assembly or processing, 3M understand that increasing efficiency is vital for our selling partners and their bottom line. From ultra-strong abrasives that keep processes running smoothly to futuristic materials that can literally lighten your workload, we provide innovative solutions that help businesses and employees improve efficiency.

3M's International Environmental Operations group enhances and integrates our global environmental management system which guarantees compliance with environmental regulations and prepares facilities to meet the requirements of international standards.

3M FAST-D 8069E references covered by this Environmental Product Declaration are manufactured by 3M Wrocław (Poland), a production site manufacturing products for IATD, a division of the Safety & Industrial Business Group (SIBG) within the 3M Company.



Our manufacturing location in
Wrocław, Poland is
ISO9001 and
ISO14001 certified

4 Life Cycle Assessment

4.1 Declared unit

The declared unit in this Environmental Product Declaration is 1 square meter of packaged 3M FAST-D 8069E. This unit equates to a reference flow of 0.495 kg tape and a respective packaging material weight of 0.147 kg (for both references).

4.2 System boundaries

The Life Cycle Assessment (LCA) study supporting this Environmental Product Declaration is a cradle-to-gate analysis, including the life cycle stages listed in the table below. Due to the exclusion of the use phase, the reference service life (RSL) is not included in the study.

Product stage			Construction process stage		Use stage							End-of-life stage			Resource recovery stage
Raw material supply	Transport	Manufacturing	Transport	Construction installation	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	Deconstruction / demolition	Waste processing	Disposal	Reuse - recovery - recycling potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C3	C4	D
X	X	X	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND	MND

(X = declared module; MND = module not declared)

A1 = Upstream module; A2-A3 = Core module; A4-C4 = Downstream module; D = Other environmental information

4.2.1 Product stage (A1-A3)

Raw material supply includes the acquisition of raw materials from nature to create usable intermediates, as well as the packaging used to ship the raw materials. All raw materials are transported from the source to the 3M manufacturing site by truck and/or boat. Most of the time, raw materials need to be packed for transportation. Loading and unloading of raw materials are not included in the study.

Production also includes all steps carried out at 3M manufacturing sites to produce the finished product, including utilities used and waste produced. The environmental profile of these energy carriers is modelled for local conditions. Machines and facilities (capital goods) required for and during production are excluded, as is transportation of employees.

4.2.2 Downstream stages (A4-A5, B1-B7, C1-C4)

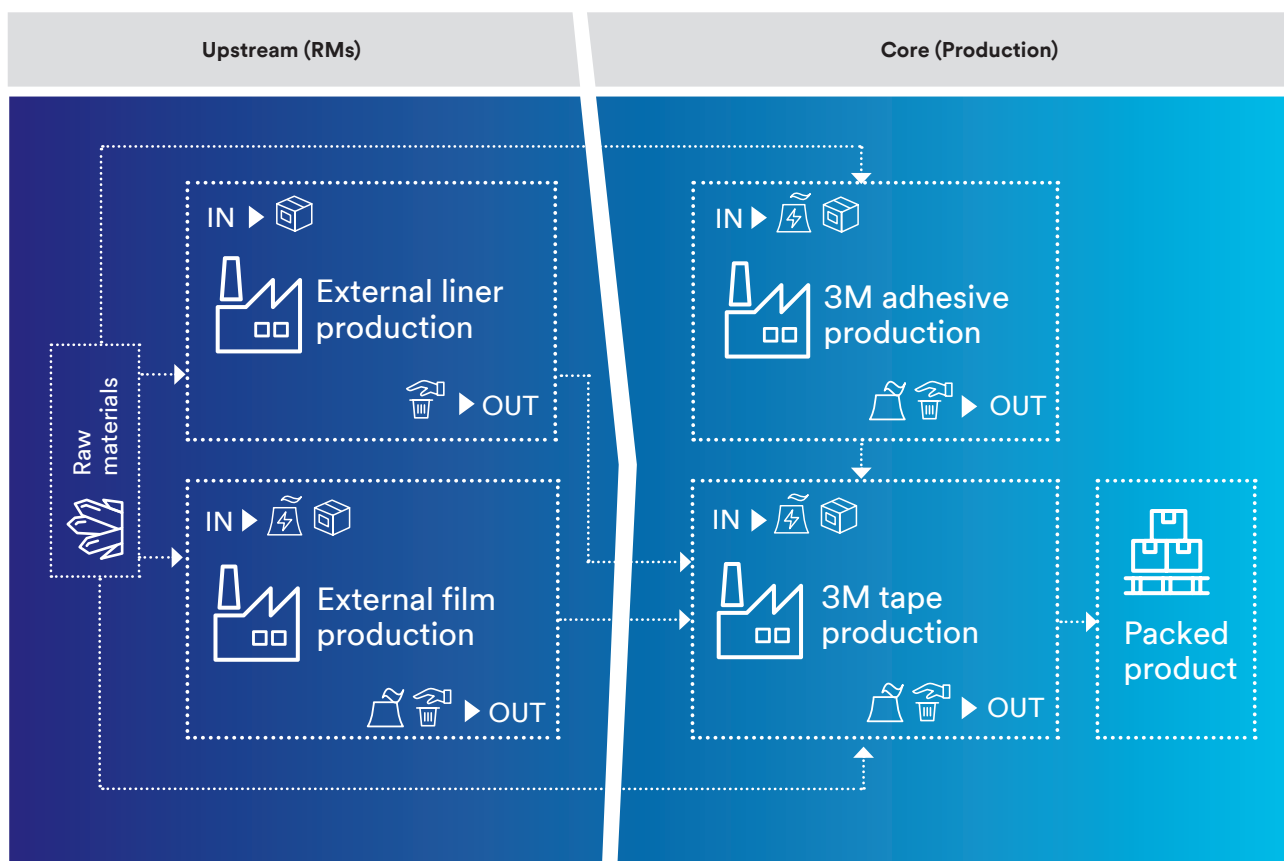
Downstream stages are excluded from the scope of the LCA study because 3M FAST-D 8069E has multiple different applications and there is only limited data available.

4.2.3 Resource recovery stage (D)

This stage is excluded because of the exclusion of downstream processes and the application of the cut-off approach.



4.2.4 Flow diagram



Legend: = packaging materials = utilities = waste = emissions

4.3 Data collection and quality

Specific data was gathered by 3M for the core processes and are based on 2018-2019 production volumes and extrapolations of measurements on specific machines.

Generic data for upstream processes are used as available in the GaBi software and databases.

Data quality analysis is performed based on the EU Product Environmental Footprint (PEF) Guidance. The overall data quality is at least good meaning that each indicator can be used in this EPD.

4.4 Calculation procedure

The LCA model was created using the GaBi software (version 9.2.0.58 DB 8.7, Service Pack 36) system for life cycle engineering, developed by thinkstep GmbH, a sphera™ company. The modelling process used both primary data collected from the actual manufacturing process, and secondary data available in the GaBi databases including industry-average data, data available from literature studies and data available from published databases. Last update of the database was 2019.

5 Environmental Performance

The environmental parameters are declared for upstream and core processes. The overall impact of the product is divided into potential environmental impacts, use of resources and other indicators. All environmental impacts are reported per declared unit.

5.1 Potential environmental impact

The reported environmental impacts, as required per PCR 2012:01 v2.31 result from characterisation models applied to the life cycle stages considered in the study. Total pollutant emissions from the operations included in the system boundaries are reported as potential environmental impacts, using the Jan. 2016 version of CML2001 characterisation factors as opposed to the EN 15804 reference to the (October 2012) version. More recent versions of characterisation factors are more likely to have a higher level of accuracy in today's society. Data refer to the declared unit.

National addition to NF EN 15804+A1 (XP P01-064/CN) requires two additional environmental impacts to be reported, air pollution and water pollution which are calculated based on characterisation factors specifically reported in tables C.10 and C.11 of the standard respectively.

National supplement to NBN EN 15804+A1 (NBN/DTD B 08-001:2017) requires eight additional environmental impacts to be reported. Apart from MAETP and TETP, which are calculated based on CML2001 characterisation factors, all other indicators are calculated following the EU Product Environmental Footprint (PEF) Guidance.

It's important to mention that in addition to EN15804 and PCR 2012:01, only the additional environmental indicators of NF EN 15804+A1 and NBN EN 15804+A1 are included in the study, whilst other additional requirements are not in scope of the EPD.

	Upstream	Core	
	A1	A2	A3
PCR 2012:01 v2.31			
ADPE [kg Sb eq.]	4.52E-06	3.79E-08	2.59E-07
ADPF [MJ]	4.55E+01	5.62E+00	6.71E+00
AP [kg SO ₂ eq.]	1.55E-02	2.71E-03	1.15E-03
EP [kg PO ₄ ³⁻ eq.]	8.91E-03	4.65E-04	2.85E-01
GWP [kg CO ₂ eq.]	1.91E+00	4.16E-01	2.71E-01
ODP [kg CFC11 eq.]	1.21E-12	1.61E-14	1.91E-11
POCP [kg C ₂ H ₂ eq.]	6.68E-04	1.59E-04	9.48E-05
National addition to NF EN 15804+A1 (XP P01-064/CN)			
AirP [m ³]	2.96E+02	2.78E+01	5.10E+01
WP [m ³]	2.94E+01	1.31E-01	1.21E-01
ADPEc [kg Sb eq.]	4.52E-06	3.76E-08	2.55E-07
National supplement to NBN EN 15804+A1 (NBN/DTD B 08-001)			
ETFW [CTUe]	1.97E+00	7.11E-02	6.67E-02
HT_c [CTUh]	9.23E-08	3.21E-09	7.62E-09
HT_nc [CTUh]	4.30E-07	2.55E-08	6.59E-07
LU [kg C deficit eq.]	2.84E+01	2.39E-01	5.91E-01
PM/RI [kg PM2.5 eq.]	9.73E-04	1.61E-04	6.11E-05
RDW [m ³ eq.]	2.49E-01	5.06E-04	5.27E-03
MAETP [kg DCB eq.]	3.27E+02	6.05E+00	2.43E+01
TETP [kg DCB eq.]	1.35E-02	5.65E-04	2.22E-02

See section 6.4 for a list of acronyms used in this table

5.2 Use of resources

The main resource consumption contributors for 3M FAST-D 8069E are reported in the table below. Use of resources without energy content is expressed in kg or m³ per declared unit. Energy data are expressed in MJ per declared unit and as net calorific value.

The net calorific value or lower heating value is calculated by subtracting the heat of vaporisation of water from the higher heating value. The results from the tables should be interpreted over the different modules and as they are calculated by the GaBi software.

	Upstream	Core	
	A1	A2	A3
PERE [MJ]	2.78E+01	2.50E-01	5.49E+00
PERM [MJ]	0.00E+00	0.00E+00	0.00E+00
PERT [MJ]	2.78E+01	2.50E-01	5.49E+00
PENRE [MJ]	2.67E+01	5.65E+00	3.92E+00
PENRM [MJ]	2.12E+01	0.00E+00	3.72E+00
PENRT [MJ]	4.79E+01	5.65E+00	7.65E+00
SM [kg]	5.58E-02	0.00E+00	9.48E-02
RSF [MJ]	0.00E+00	0.00E+00	0.00E+00
NRSF [MJ]	0.00E+00	0.00E+00	0.00E+00
FW [m ³]	1.15E+00	5.03E-04	2.41E-03

See section 6.4 for a list acronyms used in this table

5.3 Output flows and waste categories

The important output flows and waste categories for 3M FAST-D 8069E are reported in the tables below. All material flows are expressed in kg per declared unit while the exported energy data is expressed in MJ per declared unit and as net calorific value. CRU, MFR,

MER, EEE and EET are required to be reported as per EN 15804. It should be noted that 3M processes do not generate radioactive waste and the values are presented as calculated in the GaBi software.

	Upstream	Core	
	A1	A2	A3
HWD [kg]	3.98E-03	2.42E-07	1.10E-02
NHWD [kg]	8.23E-02	3.86E-04	2.25E-01
RWD [kg]	9.34E-04	1.13E-05	3.78E-04
CRU [kg]	0.00E+00	0.00E+00	0.00E+00
MFR [kg]	2.42E-03	0.00E+00	1.01E-01
MER [kg]	0.00E+00	0.00E+00	0.00E+00
EEE [MJ]	0.00E+00	0.00E+00	0.00E+00
EET [MJ]	0.00E+00	0.00E+00	0.00E+00

See section 6.4 for a list acronyms used in this table

5.4 Release of dangerous substances during the use stage

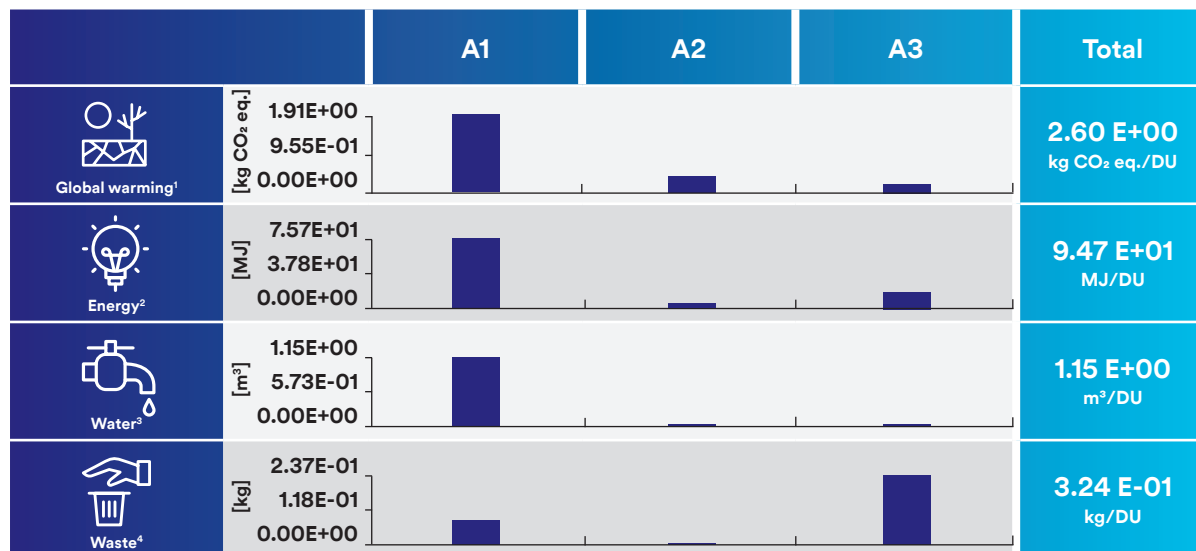
As this product is a passive product, the use stage (B1-B7) is excluded from the study.

As a result, no information is provided in this section for the release of dangerous substances to indoor air, soil and water during this stage.

6 Additional Information

6.1 Other environmental information

6.1.1 LCA results interpretation



(1) Relates to CML2001 global warming potential (GWP)

(2) Relates to the total use of primary energy (PERT + PENRT)

(3) Relates to the fresh water use (FW)

(4) Relates to the total amount of waste generated (HWD + NHWD + RWD)
DU = Declared Unit

The most significant global warming potential of the product's life cycle is related to the raw material supply (A1) followed by transportation (A2) as shown in the first chart represented above. A1 is also the module with the highest impact on energy consumption, and has the only significant impact on water use. Another life cycle stage with a considerable impact on energy consumption is manufacturing (A3). Both A1 and A3 module have a significant impact on waste.

Note that A1 does not only contain the raw material production, but also the generation of energy used during manufacturing which may suggest a skewed result for this module. Module A2 which relates to transportation is not significant except for global warming.

6.1.2 Uncertainty on the environmental indicators

Data quality and uncertainty are mutually dependent. The precision of the data depends on measuring tolerance, assumptions, completion, comprehensiveness of the considered system and the representativeness of the data. Uncertainty is also introduced in the impact assessment phase of the study, and will vary according to the impact categories considered.

To get an idea of the uncertainty of the potential environmental impact, it is calculated for each reference and midpoint based on a pedigree matrix, using six different data quality indicators, and Monte Carlo analysis. The uncertainty results are presented below and are calculated for the totals of the different modules and only for the potential environmental indicators of PCR 2012:01.

	Min	Max	Base	Δ%
ADPE [kg Sb eq.]	4.05E-06	5.69E-06	4.82E-06	18%
ADPF [MJ]	5.31E+01	6.36E+01	5.78E+01	10%
AP [kg SO ₂ eq.]	1.68E-02	2.22E-02	1.93E-02	15%
EP [kg PO ₄ ³⁻ eq.]	2.65E-01	3.26E-01	2.95E-01	11%
GWP [kg CO ₂ eq.]	2.34E+00	2.94E+00	2.60E+00	13%
ODP [kg CFC11 eq.]	1.85E-11	2.22E-11	2.03E-11	10%
POCP [kg C ₂ H ₂ eq.]	8.27E-04	1.04E-03	9.22E-04	13%

6.2 Social and economic aspects

As a company which operates around the world, including many underdeveloped areas, 3M has grown into a global leader in helping others. For many years we've been investing our people and resources to make a positive impact through schemes like 3Mgives, focusing on helping improve education, communities and the environment.

3Mgives improves lives and builds sustainable communities through social investments and thoughtful engagement of 3Mers worldwide. 3M was one of the first companies to establish a foundation in 1953, and since then we've contributed over \$1.45 billion in cash and in-kind gifts to our community partners.

Our employees regularly take on challenges to raise money through charity events and share their skills through 3M's Impact programme, with diverse teams of 3Mers travelling to communities around the world to spend two immersive weeks collaborating with a local non-profit organisation, social enterprise or government agency to contribute to a solution for a pressing social or environmental issue.

3M also has a strong culture of inclusion and diversity, which is an essential driver of our continual innovation. To encourage this, we regularly form strategic partnerships with many professional associations, colleges and universities to help identify diverse candidates and regularly participate in campus recruiting activities.

6.3 Validity of the EPD and changes versus previous version

This version of the Environmental Product Declaration is valid until 2025-07-06.

Compared to the previous version of the Environmental Product Declaration, the following changes were made to the supporting Life Cycle Assessment:

- Updated some transportation modes and distances
 - Updated reference year for 3M adhesive production
- Throughout its validity, on a yearly basis, or upon modifications in the production process, the supply chain is evaluated to assess the need for an update of the supporting Life Cycle Assessment and corresponding Environmental Product Declaration.

If changes in the product's life cycle result in potential environmental impacts varying more than 10% from the numbers reported in the sections above, the Environmental Product Declaration is revised accordingly.

Regardless, the Environmental Product Declaration shall be reviewed when approaching the end of its validity period. At that stage, a new version of the Environmental Product Declaration shall be published as appropriate.

6.4 Acronyms

Acronym	Meaning
3M	Minnesota Mining and Manufacturing
3P	Pollution Prevention Pays
ADPE	Abiotic Depletion Potential, elements
ADPEc	Abiotic Depletion Potential, elements with complementary factors
ADPF	Abiotic Depletion Potential, fossil
AirP	Air Pollution
AP	Acidification Potential
B	Belgium
BE	Belgium
CE	Conformité Européenne
C ₂ H ₂	Acetylene
CFC-11	Trichlorofluoromethane
CML	Center of Environmental Science of Leiden University
CN	China
CO ₂	Carbon Dioxide
CPC	Construction Products and Construction Services/ Central Product Classification
CRU	Components for re-use
CTUh	Comparative Toxic Unit for human
CTUe	Comparative Toxic Unit for aquatic ecotoxicity impacts
DB	Database
DTD	Document Type Definition
DU	Declared unit
EEE	Exported electrical energy
EET	Exported thermal energy
EMEA	Europe, the Middle East, and Africa
EN	European Norm
EoL	End of Life
EP	Eutrophication Potential
EPD®	Environmental Product Declaration
eq.	Equivalent
ETFW	Ecotoxicity Freshwater
EU	European Union
Euro	Europe
FAST	Flexible Air Sealing Tape
FW	Use of net fresh water
GaBi	Ganzheitliche Bilanzierung (German for holistic balancing)
GmbH	Gesellschaft mit beschränkter Haftung
GWP	Global Warming Potential
HT_c	Human toxicity (carcinogenic effects)
HT_nc	Human toxicity (non-carcinogenic effects)
HWD	Hazardous waste disposed
IATD	Industrial Adhesives and Tapes Division
ISO	International Organization for Standardization
IT	Italy

kg	Kilogram
LCA	Life Cycle Analysis
LU	Land Use
m	Meter
m ³	Cubic meter
mm	Millimeter
MAETP	Marine Aquatic Ecotoxicity Potential
MER	Materials for energy recovery
MFR	Materials for recycling
MJ	Megajoule
MND	Module Not Declared
N/A	Not Applicable
NBN	Bureau of Normalization (Belgium)
NF	Bureau of Normalization (France)
NRSF	Use of non-renewable secondary fuels
NSAI	National Standards Authority of Ireland
ODP	Ozone Depletion Potential
PCR	Product Category Rules
PEF	Product Environmental Footprint
PENRE	Use of non-renewable primary energy as energy carrier
PENRM	Use of non-renewable primary energy as raw materials
PENRT	Total use of non-renewable primary energy
PERE	Use of renewable primary energy as energy carrier
PERM	Use of renewable primary energy as raw materials
PERT	Total use of renewable primary energy
PM/RI	Particulate Matter/ Respiratory Inorganics
PO ₄	Phosphate
POCP	Photochemical Ozone Creation Potential
RDW	Resource Depletion Water
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RM	Raw Material
RSF	Use of renewable secondary fuels
RSL	Reference service life
RWD	Radioactive waste disposed
Sb	Antimony
SIBG	Safety & Industrial Business Group
SDS	Safety Data Sheet
SGS	Société Générale de Surveillance
SM	Use of secondary material
SO ₂	Sulphur Dioxide
S.p.A	Società per azioni
SVHC	Substances of Very High Concern
TDS	Technical Data Sheet
TETP	Terrestrial Ecotoxicity Potential
ts	thinkstep GmbH



6.5 Variation ranges

In the table shown below, comparisons between the reference product and the other product are given in a % difference below the absolute impact values.

Differences between the reference product and the other reference do not exceed the 10% threshold, thus substantiating the selection of the reference product to represent the other reference in the EPD.

	Reference product (8069E FAST-D Seal Hold Tape 50 mm x 25 m specialty)	8069E FAST-D Seal Hold Tape 50 m x 25 m
ADPE [kg Sb eq.]	4.82E-06	4.82E-06 0%
ADPF [MJ]	5.79E+01	5.79E+01 0%
AP [kg SO ₂ eq.]	1.93E-02	1.93E-02 0%
EP [kg PO ₄ ³⁻ eq.]	2.95E-01	2.95E-01 0%
GWP [kg CO ₂ eq.]	2.60E+00	2.60E+00 0%
ODP [kg CFC11 eq.]	2.03E-11	2.03E-11 0%
POCP [kg C ₂ H ₂ eq.]	9.22E-04	9.22E-04 0%

6.6 References

Softa K., Tibax D., LCA report "Project Vesta" (EPD0004, version 2), 3M Internal, Diegem, 2020.

SGS Italia S.p.A., EPD Process Certification, Certificate N. IT14/0823, (2020-09-18).

International Standardization Organization, Environmental Management - Life Cycle Assessment - Principles and Framework (ISO 14040:2006), Dublin 9: NSAI, 2006.

International Standardization Organization, Environmental Management - Life Cycle Assessment - Requirements and Guidelines (ISO 14044:2006), Dublin 9: NSAI, 2006.

International Standardization Organization, Environmental labels and declarations - Type III environmental declarations - Principles and procedures (ISO 14025:2006), La Plaine Saint-Denis: Afnor, 2013.

European Standard, Sustainability of construction works - Environmental Product Declarations - Core rules for the product category of construction products (EN 15804:2012+A1:2013), La Plaine Saint-Denis: Afnor, 2013.

The International EPD® System, General Programme Instructions (version 3.01), Stockholm, 2019.

The International EPD® System, Construction Products and Construction Services for multiple CPC codes (PCR 2012:01, version 2.31), Stockholm, 2019.

National addition to NF EN 15804+A1, Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction (XP P01-064/CN), La Plaine Saint-Denis: Afnor, 2016.

National supplement to NBN EN 15804+A1, Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction (NBN/DTD B 08-001), Brussels: NBN, Bureau for Standardisation, 2017.

3M Building Envelope Product Portfolio PowerPoint presentation - Safety & Industrial Business Group.

Technical Datasheet 3M FAST-D 8069E: <http://multimedia.3m.com/mws/media/1302953O/flexible-air-sealing-tape-8069e-fast-d.pdf>.

More information on Sustainability at 3M:
<http://www.3M.com/Sustainability>



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