OWNER OF THE EPD: Camfil Malaysia, Plot 9A & 9B, Lorong Bemban 1,
Bemban Industrial Estate Batu Gajah, 31000 Pusing, Perak, Malaysia

CONTACT PERSON: Tobias Zimmer | +49 40 307 740 58 | tobias.zimmer@camfil.com

ENVIRONMENTAL PRODUCT DECLARATION

In accordance with ISO 14025:2006 and EN 15804:2012+A2:2019/AC:2021

HI-FLO XLS ePM1 60%

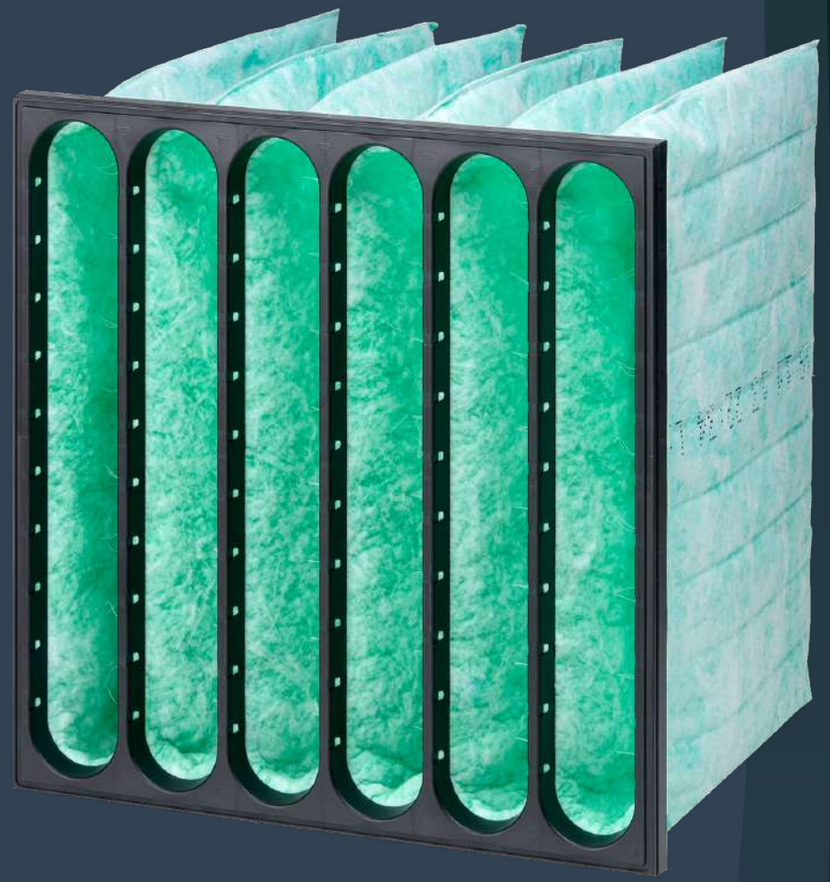
MADE IN MALAYSIA

EPD of multiple products, based on a representative product

Product variants declared in the EPD:

Hi-Flo XLS 7/370 0160 | Hi-Flo XLS 7/520 0160 | Hi-Flo XLS 7/640 0160

Programme:	The International EPD® System, www.environdec.com
EPD Registered through the fully alligned regional Hub:	EPD Southeast Asia, www.epd-southeastasia.com
Programme operator:	EPD International AB
Regional Hub:	EPD Southeast Asia
EPD registration number:	EPD-IES-0017775
Publication date:	2024-12-10
Valid until :	2029-12-10



*An EPD should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com.

Programme information

ISO standard ISO 14025:2006 and CEN standard EN 15804 serves as the core Product Category Rules (PCR)

PRODUCT CATEGORY RULES (PCR): PCR 2019:14 Construction products, version 1.3.4. of 2024-04-30, valid until 2025-06-20 and UN CPC code in CPC 2.1: 43914

PCR REVIEW WAS CONDUCTED BY: The Technical Committee of the International EPD® System. See www.environdec.com/TC for a list of members.
Review chair: Claudia A. Peña, University of Concepción, Chile. The review panel may be contacted via the Secretariat www.environdec.com/contact.

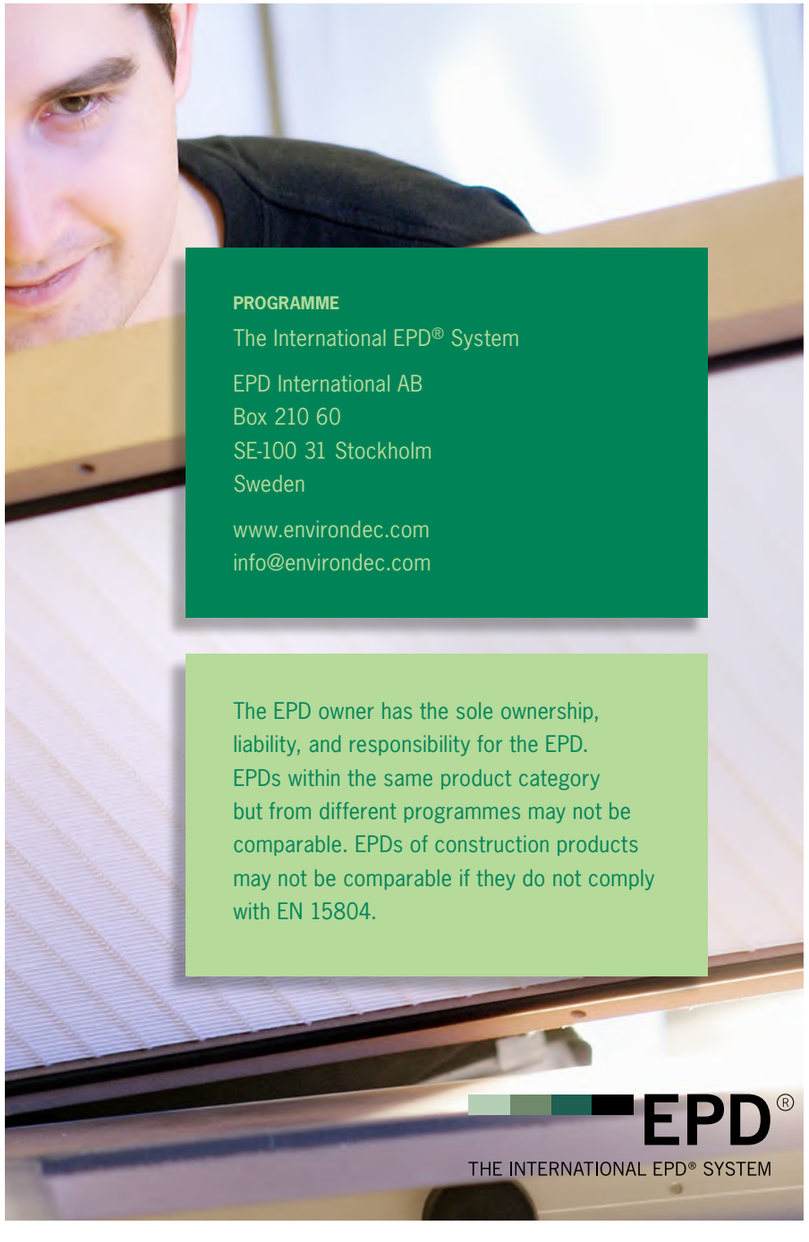
INDEPENDENT THIRD-PARTY VERIFICATION OF THE DECLARATION AND DATA, ACCORDING TO ISO 14025:2006:
☐ Internal ☑ External | ☐ EPD process certification ☑ EPD verification

LCA ACCOUNTABILITY: Umairah Nizam, Ph.D., & Siti Nurhayati Kamaruddin, Camfil Group

THIRD PARTY VERIFIER: Stephen Forson, ViridisPride Ltd

IN CASE OF RECOGNISED INDIVIDUAL VERIFIERS:
APPROVED BY: The International EPD® System

PROCEDURE FOR FOLLOW-UP OF DATA DURING EPD VALIDITY INVOLVES THIRD PARTY VERIFIER: ☐ Yes ☑ No



PROGRAMME
The International EPD® System

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The EPD owner has the sole ownership, liability, and responsibility for the EPD. EPDs within the same product category but from different programmes may not be comparable. EPDs of construction products may not be comparable if they do not comply with EN 15804.

EPD®
THE INTERNATIONAL EPD® SYSTEM

Company information

As a leading manufacturer of premium clean air solutions, Camfil provides commercial and industrial solutions for air filtration and air pollution control that improves worker and equipment productivity, minimises energy use, benefits human health and the environment. More information about the organisation can be found on the website in the section About Camfil.

ISO 9001
ISO 14001

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

EPD®
THE INTERNATIONAL EPD® SYSTEM

Hi-Flo XLS ePM1 60%

Hi-Flo XLS is a bag filter produced by Camfil Malaysia (Perak, Malaysia) with dimensions according to EN 15805, and filtration class of ePM1 60% according to ISO 16890. It consists of an aerodynamic plastic frame and glass fibre media, for the particle filtration of air and other gases.

Bag filters, or pocket filters, are used in HVAC applications as final filters in industrial, commercial and residential applications, and also serves as prefilters in HEPA installations to improve indoor air quality and comfort.

The filters in the supply air are used in first and second filter stages, either as complete filtration solution for these applications or as prefilters for cleanroom process applications. The filters are also used in the exhaust air or in recirculation systems to protect the air handling units. Bag filters have a significantly higher dust holding capacity and longer lifetime than other filters.

UN CPC CODE

CPC 2.1: 43914 – Filtering or purifying machinery and apparatus, for liquids or gases, except oil filters, petrol filters and air intake filters for internal combustion engines. HS 2017: 842139 – Machinery; for filtering or purifying gases, other than intake air filters for internal combustion engines.

HI-FLO XLS ePM1 60% ATTRIBUTES

- Full module standard size: 592x592 mm (WxH)
- Available in many different sizes, for more information see product information
- Number of bags for full module: 6
- Depth: 370–640 mm
- Frame material: Virgin plastic (HIPS)
- Media: Glass fibre

VARIATIONS OF BAG FILTERS INCLUDED IN THIS DECLARATION:

FILTER VARIANT	NO. OF BAGS	LENGTH OF BAGS (MM)	FILTER CLASS ACC. TO ISO16890	VARIATION IMPACT OF GWP-GHG (%)
XLS 7/370	6	370	ePM1 60%	-
XLS 7/520	6	520	ePM1 60%	41.8
XLS 7/640	6	640	ePM1 60%	17.8

**The results present specific data for each included variant.*

Life Cycle Assessment

Cradle-to-gate with options, modules C1-C4, module D and with optional modules, as described in the PCR for construction products version 1.3.4 of 2024-04-30 used. This means that additional life cycle stages except the mandatory stages A1-A3, C1-C4 and D are also included, which is A4 (Transport), A5 (Installation), B1 (Use), and B6 (Operational energy use).

PRODUCT REPRESENTATIVENESS:
Hi-Flo XLS bag filters are available in different length of bags depending on the application needs. This EPD concerns the Camfil's Hi-Flo XLS bag filters representing the representative product; Hi-Flo XLS 7/370 0160. The representative product was chosen based on their high order volumes and status as top-selling models within their respective product groups. In an EPD of multiple products, the difference (in %) between the declared GWP-GHG result, and the product with GWP-GHG results furthest away from the declared results, for modules A1-A3 (A1-A5 for services), is reported in the EPD. For EPDs of multiple products, EPD shall declare the variation of each environmental impact indicator results for which the variation, aggregated over all included modules (from A to C), is above 10% between any of the included products.

FUNCTIONAL UNIT / DECLARED UNIT: 1 bag filter.

REFERENCE SERVICE LIFE: One year - derived from hygienic concerns acc. to the guideline VDI 6022.

TIME REPRESENTATIVENESS: Data collection was performed during 2023. Data for the processes in A3 represent values for the years 2023. Age of background data range between year 2022 and 2024.

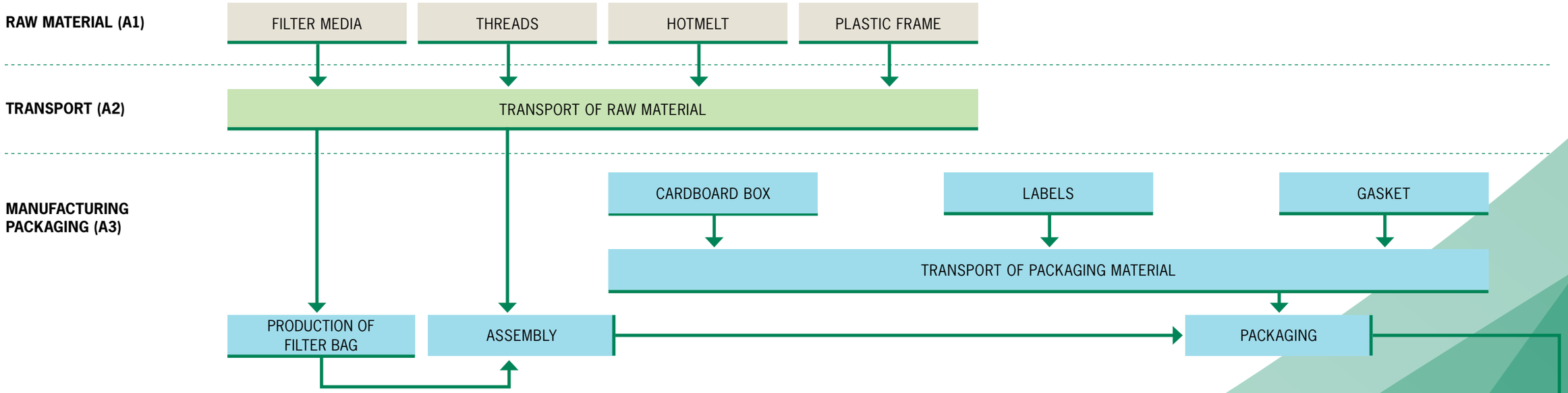
LCA SOFTWARE USED: GaBi LCA for Experts version 10.7.1.28, Schema 8007.

DATABASE USED: Thinkstep Database SP 40, Ecoinvent v. 3.5.

	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	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
Module	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Module Declared	X	X	X	X	X	X	ND	ND	ND	ND	X	ND	X	X	X	X	X
Geography	MY	GLOBAL	MY	ASIA	MY	ASIA	-	-	-	-	ASIA	-	MY	MY	MY	MY	MY
Specific Data Used	41%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - Products	+17.8% / -41.8%			-	-	-	-	-	-	-	-	-	-	-	-	-	-
Variation - Sites	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

GEOGRAPHICAL SCOPE: The study represents the manufacturing of air filters in Camfil manufacturing facility in Batu Gajah region of the Perak, Malaysia. Specific data used and variations are based on the GWP-GHG indicator.

Description of system boundaries:



MODULE A1 covers extraction and processing of raw materials, as well as production of the materials and components used for production of bag filters: filter media, frame, hotmelt, and threads.

MODULE A2 covers transportation of the materials and components to the production site in Ipoh, Malaysia.

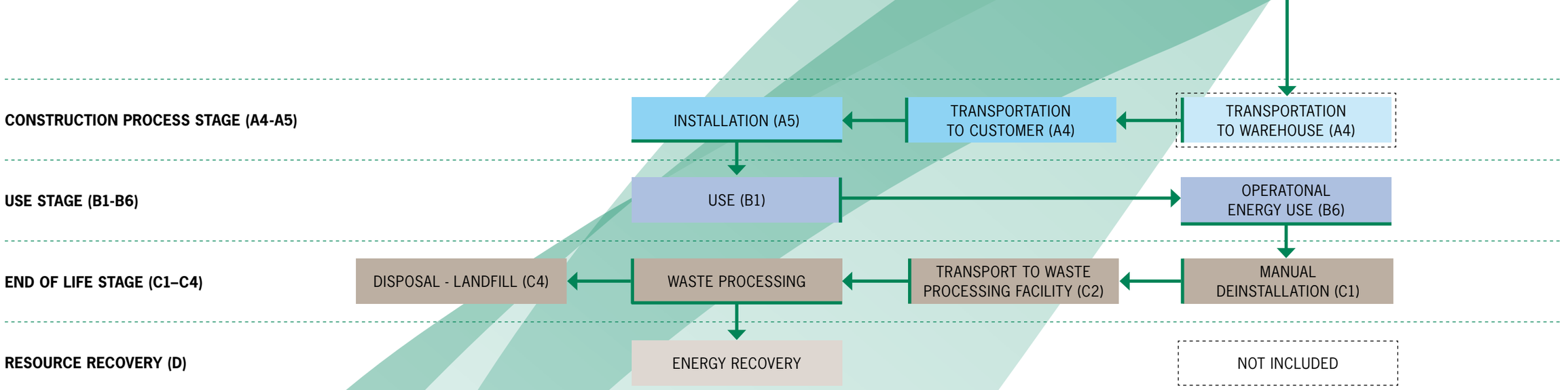
TRANSPORT MODE	TYPE	DETAIL
Road	Vehicle	Truck
	Load Factor	85%
	Size Class	23-29 metric ton
	Emission Standard	Euro 5
	Fuel Type	Diesel
Sea	Vehicle	RoRo Ship
	DWT (Load Capacity)	8000-10000 tonnes
	Fuel Type	Light Fuel Oil

MODULE A3 covers production of the bag filters at the production site in Ipoh, Malaysia. This stage includes electricity consumption for bag assembly and filter assembly, as well as the electricity for general processes in the production hall. It also includes production and transport of packaging materials as cardboard box and labels.

The electricity mix used during production at the Camfil factory in Ipoh, Malaysia is modelled as a 100% non-renewable electricity mix provided by Tenaga Nasional Berhad.

In addition, the energy source behind Malaysia grid use and the climate impact is explained in details in table here:

INFORMATION	DESCRIPTION
Geographical representativeness description	Split of energy sources in MY: Natural gas (45%), Oil (26%), Coal (<25%), Other (<3%)
Type of dataset	Cradle to gate, Ecoinvent
Source	IEA (International Energy Agency), 2023
CO_2 emission kg CO_2 eq./kWh	0.851 (medium voltage)



MODULE A4 covers transportation of the filter bag to the customers in Asia Pacific region. The mode of transport to the customer are by truck and ship, and it is representative for the year 2023.

TRANSPORT MODE	TYPE	DETAIL
Road	Vehicle	Truck
	Size Class	29 metric ton
	Emission Standard	Euro 5
	Fuel Type	Diesel
Sea	Vehicle	RoRo Ship
	DWT (Load Capacity)	8000-10000 tonnes
	Fuel Type	Light Fuel Oil

MODULE A5 covers manual removal of the previous filter and manual installation of the new filter.

MODULE B1 covers accumulation of dust in the filter and hence the reduction of particulate matter in the air.

MODULE B6 covers electricity consumption during use phase of the bag filter during one year. Calculation of electricity consumption was performed according to Eurovent 7/25-2024.

MODULE C1 covers manual operation of filter removal from the installation.

MODULE C2 covers transport of the used filter from the user site to the waste processing facility. An average transport distance has been estimated to 187 km.

TRANSPORT MODE	TYPE	DETAIL
Road	Vehicle	Truck
	Size Class	20-26 metric ton
	Emission Standard	Euro 5
	Fuel Type	Diesel
	Distance	187 km

MODULE C3 should cover incineration of the filter including its energy recovery, its packaging, and the collected dust. However, no such activities occurred in this system boundary even it is declared.

MODULE C4 covers the landfill disposal of the used filter.

MODULE D should cover the materials recycling potential, however no such activities occurred in this system boundary even it is declared.

CUT-OFF CRITERIA:

The study applies a cut-off criterion of maximum 5% of energy and mass for all considered modules, which complies with the maximum cut-off criteria established by the standard.

ALLOCATION:

Source of raw material, energy consumption and raw material transportation were weighted according to 2023 production figures. In addition, hazardous and non-hazardous waste amounts were also allocated from the 2023 total waste generation.

EXCLUDED LIFECYCLE STAGES:

MODULES A1-A3: Close to 100% of all raw material used in the production has been included in the model calculations. Impact from production and maintenance of infrastructure and equipment used for the manufacturing of the products was excluded from the study (since it was assumed to have a minor share per one product). However, the electricity used by that equipment as well as the energy used for general processes in the production hall, i.e. lightning and heating was included. Business travel of personnel as well as travel to and from work by personnel was excluded from the study since it was assumed to have a minor share per one product. Additionally, the media waste generated during A3 was sent to landfill for disposal.

MODULES A4-A5: Transport to customer (A4) has been included in the study with close to 100% of all input flows. Installation (A5) has been included in the study and considers: manual removal of a dirty filter, manual installation of a new filter, transportation of a cardboard box to a waste management facility. During installation cardboard box from the clean filter is used for packing of the dirty, exchanged filter. As the removal and installation processes are manual, the impact is close to 0. However, the box transportation to waste management plant and its disposal in landfill has been analysed and the impacts are reported in A5.

MODULES B1-B7: Regarding Use (B1) close to 100% of input flow of dust has been included. Use phase (B6) has been included in the study with close to 100% of all input flows.

MODULES C1-C4: Close to 80% of all input flows have been included for the analysis of these modules. However, no such activities occurred in this system boundary even C3 is declared. Landfill of the used filter is included in C4.

MODULE D: No such activities occurred in this system boundary even it is declared. An additional assumption and data collection aspect for the study is that all environmental impacts are accounted for when extracting the raw materials used for the products, which is defining the boundary towards the nature.

Content declaration

PRODUCT COMPONENTS	SUBSTANCES	WEIGHT, KG	POST-CONSUMER MATERIAL, WEIGHT-%	RENEWABLE MATERIAL, WEIGHT-%
XL-frame		**0.95**	0%	0%
	Polystyrene Styron 485	(≤94%)		
	71 Nature	(≤6%)		
	HIPS (Carbon black)	(<0.1%)		
Filter media Hi-Flo ePM1 60%		**0.14 – 0.25**	0%	0%
	Glass type 902 non biospersistent microfiber	(60-70%)		
	Glass woven fabrice	(0-20%)		
	Polyester backing	(0-20%)		
	Phenol based resin	(8-10%)		
Hot melt		**0.109 – 0.186**	0%	0%
	Wax	(<20%)		
	Polymer	(<40%)		
	Ester with glycerol	(<0,5%)		
	Antioxinant	(<50%)		
Thread		**0.009 – 0.014**	0%	0%
	Polyester	(100%)		

PACKAGING MATERIALS	SUBSTANCES	WEIGHT, KG	WEIGHT-% (VERSUS THE PRODUCT)	WEIGHT BIOGENIC CARBON, KG C
Frame label		**0.0004**	0.02%	0
	PET	(100%)		
Gasket		**0.007**	0.30-0.35%	0
	Polyethylene	(100%)		
Cardboard box		**0.33**	15.6-18.6%	0.152
	Cardboard	(100%)		
Box label		**0.0014**	0.04-0.05%	0%
	PET	(100%)	0.02%	

**No substances included in the product or in the packaging have been listed as Substance of Very High Concern (SVHC)*

NOTE: 1 kg of biogenic carbon is equivalent to 44/12 kg of CO_2

RECYCLED MATERIAL

The box contains 12% of recycled cardboard.


Environmental performance
EPD®
THE INTERNATIONAL EPD® SYSTEM

Mandatory impact category indicators according to Environmental Footprint 3.1

XLS 7/370 0160

RESULTS FOR 1 BAG FILTER

HI-FLO XLS 7/370 0160 Filter class ePM1 60%	A1-A3	A4	A5	B1	B6	C1	C2	C3	C4	D
Global Warming Potential total (GWP-total) [kg CO_2 eq.]	8.08E+00	2.58E+00	5.37E-01	0.00E+00	1.25E+03	0.00E+00	4.09E-02	0.00E+00	4.19E-02	0.00E+00
Global Warming Potential fossil fuels (GWP-fossil) [kg CO_2 eq.]	7.55E+00	2.58E+00	3.57E-02	0.00E+00	1.24E+03	0.00E+00	4.08E-02	0.00E+00	4.19E-02	0.00E+00
Global Warming Potential biogenic (GWP-biogenic) [kg CO_2 eq.]	4.60E-01	5.26E-04	9.55E-02	0.00E+00	6.86E+00	0.00E+00	2.36E-05	0.00E+00	4.77E-05	0.00E+00
Global Warming Potential land use and land use change (GWP-luluc) [kg CO_2 eq.]	7.63E-03	2.86E-05	2.38E-05	0.00E+00	7.44E+00	0.00E+00	8.81E-07	0.00E+00	9.04E-07	0.00E+00
Ozone Depletion Potential (ODP) [kg CFC 11 eq.]	1.53E-08	2.51E-13	4.85E-14	0.00E+00	2.40E-05	0.00E+00	1.41E-15	0.00E+00	1.45E-15	0.00E+00
Acidification Potential (AP) [mol H^+ eq.]	2.42E-02	4.56E-02	1.88E-04	0.00E+00	5.98E+00	0.00E+00	2.44E-04	0.00E+00	2.51E-04	0.00E+00
Eutrophication Potential reaching freshwater end compartment (EP-freshwater) [kg P eq.]	3.10E-04	4.07E-07	3.34E-06	0.00E+00	5.63E-01	0.00E+00	6.41E-09	0.00E+00	6.58E-09	0.00E+00
Eutrophication Potential reaching marine end compartment (EP-marine) [kg N eq.]	7.06E-03	2.36E-02	1.08E-04	0.00E+00	8.99E-01	0.00E+00	1.19E-04	0.00E+00	1.22E-04	0.00E+00
Eutrophication Potential terrestrial (EP-terrestrial) [mol N eq.]	9.36E-02	2.58E-01	7.55E-04	0.00E+00	8.68E+00	0.00E+00	1.31E-03	0.00E+00	1.34E-03	0.00E+00
Photochemical Ozone Formation Potential (POCP) [kg NMVOC eq.]	2.39E-02	6.23E-02	3.55E-04	0.00E+00	2.61E+00	0.00E+00	2.31E-04	0.00E+00	2.37E-04	0.00E+00
Abiotic Depletion for non-fossil resources (ADP-minerals&metals) [kg Sb eq.]* **	1.49E-06	8.56E-09	8.04E-10	0.00E+00	9.89E-04	0.00E+00	2.63E-10	0.00E+00	2.70E-10	0.00E+00
Abiotic Depletion for fossil resources (ADP-fossil) [MJ, net calorific value]* **	1.77E+02	3.46E+01	5.23E-01	0.00E+00	1.81E+04	0.00E+00	5.64E-01	0.00E+00	5.78E-01	0.00E+00
Water Use Deprivation Potential (WDP) [m^3 world eq. deprived]* **	1.69E+00	2.26E-03	2.05E-03	0.00E+00	4.17E+02	0.00E+00	6.98E-05	0.00E+00	7.16E-05	0.00E+00

*Disclaimer 1: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator.

**Disclaimer 2: It is discouraging the use of the results of modules A1-A3 (A1-A5 for services) without considering the results of module C. The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

Additional mandatory and voluntary impact category indicators

XLS 7/370 0160

RESULTS FOR 1 BAG FILTER

HI-FLO XLS 7/370 0160 Filter class ePM1 60%	A1-A3	A4	A5	B1	B6	C1	C2	C3	C4	D
Global warming potential for greenhouse Gases (GWP-GHG) [kg CO2 eq.]*	7.58E+00	2.58E+00	4.03E-01	0.00E+00	1.26E+03	0.00E+00	4.09E-02	0.00E+00	4.19E-02	0.00E+00
Potential for particulate matter formation (PM) [Disease incidence]	7.46E-07	7.01E-07	1.55E-09	-3.28E-05	1.51E-05	0.00E+00	8.32E-10	0.00E+00	8.54E-10	0.00E+00
Ionizing radiation potential (IRP) [kBq U235 eq.]	2.50E-01	1.66E-03	7.54E-04	0.00E+00	1.73E+00	0.00E+00	1.27E-05	0.00E+00	1.30E-05	0.00E+00
Ecotoxicity potential for freshwater (ETP-fw) [CTUe]	7.64E+01	1.92E+01	3.99E-01	0.00E+00	2.84E+03	0.00E+00	5.61E-01	0.00E+00	5.76E-01	0.00E+00
Human toxicity potential, cancer effects (HTP-c) [CTUh]**	6.67E-09	3.10E-10	1.98E-11	0.00E+00	2.63E-07	0.00E+00	9.22E-12	0.00E+00	9.46E-12	0.00E+00
Human toxicity potential, non-cancer effects (HTP-nc) [CTUh]**	1.00E-07	6.65E-09	2.17E-09	0.00E+00	9.25E-06	0.00E+00	2.16E-10	0.00E+00	2.22E-10	0.00E+00
Land use (LU) [Pt]**	4.80E+01	6.72E-02	3.73E-02	0.00E+00	1.80E+03	0.00E+00	8.56E-04	0.00E+00	8.78E-04	0.00E+00

*Disclaimer 1: This indicator accounts for all greenhouse gases except biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. As such, the indicator is identical to GWP-total except that the CF for biogenic CO_2 is set to zero.

**Disclaimer 2: It is discouraging the use of the results of modules A1-A3 (A1-A5 for services) without considering the results of module C. The estimated impact results are only relative statements, which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins and/or risks.

Resource use indicators

XLS 7/370 0160

RESULTS FOR 1 BAG FILTER

HI-FLO XLS 7/370 0160 Filter class ePM1 60%	A1-A3	A4	A5	B1	B6	C1	C2	C3	C4	D
Use of renewable primary energy (PERE) [MJ]	1.08E+01	1.05E-01	3.90E-02	0.00E+00	1.12E+03	0.00E+00	1.88E-03	0.00E+00	1.93E-03	0.00E+00
Primary energy resources used as raw materials (PERM) [MJ]	5.15E+00	0.00E+00	-5.15E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-1.93E-03	0.00E+00
Total use of renewable primary energy resources (PERT) [MJ]	1.59E+01	1.05E-01	-5.11E+00	0.00E+00	1.12E+03	0.00E+00	1.88E-03	0.00E+00	0.00E+00	0.00E+00
Use of non-renewable primary energy (PENRE) [MJ]	1.29E+02	3.46E+01	5.23E-01	0.00E+00	1.81E+04	0.00E+00	5.64E-01	0.00E+00	4.81E+01	0.00E+00
Non-renewable primary energy resources used as raw materials (PENRM) [MJ]	4.81E+01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	-4.81E+01	0.00E+00
Total use of non-renewable primary energy resources (PENRT) [MJ]	1.77E+02	3.46E+01	5.23E-01	0.00E+00	1.81E+04	0.00E+00	5.64E-01	0.00E+00	0.00E+00	0.00E+00
Input of secondary material (SM) [kg]	3.96E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of renewable secondary fuels (RSF) [MJ]	3.07E-24	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of non-renewable secondary fuels (NRSF) [MJ]	3.60E-23	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of net fresh water (FW) [m^3]	5.07E-02	1.28E-04	6.16E-05	0.00E+00	9.72E+00	0.00E+00	2.33E-06	0.00E+00	2.39E-06	0.00E+00

Waste indicators and output flow indicators

XLS 7/370 0160

RESULTS FOR 1 BAG FILTER

HI-FLO XLS 7/370 0160 Filter class ePM1 60%	A1-A3	A4	A5	B1	B6	C1	C2	C3	C4	D
Hazardous waste disposed (HWD) [kg]	4.60E-06	3.62E-11	3.62E-11	0.00E+00	0.00E+00	0.00E+00	3.61E-13	0.00E+00	3.70E-13	0.00E+00
Non-hazardous waste disposed (NHWD) [kg]	7.90E-02	1.08E-03	3.30E-01	0.00E+00	0.00E+00	0.00E+00	3.33E-05	0.00E+00	1.21E+0	0.00E+00
Radioactive waste disposed (RWD) [kg]	2.02E-03	1.07E-05	5.11E-06	0.00E+00	0.00E+00	0.00E+00	1.47E-07	0.00E+00	1.51E-07	0.00E+00
Components for reuse [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for energy recovery [kg]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, electricity [MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Exported energy, thermal [MJ]	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

USE OF THE PRODUCT

To ensure the efficient and sustainable performance of the filter, the end user is obliged to guarantee specific operational conditions. Detailed information about the use of Hi-Flo XLS is included in product data sheet for Hi-Flo XLS.

INSTRUCTIONS FOR STORAGE, HANDLING AND MAINTENANCE

Construction of the bag filter requires a certain method for storing, handling and maintaining the product. Our recommendations are described in Handling and maintenance instruction for bag filters.

FILTER LIFETIME

Bag filters are designed to serve efficiently during a certain period, which depends on several factors. An unambiguous way to define the adequate filter lifetime is described in standard EN 13053.
This method is dependent on the filter resistance and is determined by the final pressure drop.
According to EN 13053, the final pressure drop is reached when the initial pressure drop has increased by 100 Pa (initial dP + 100 Pa), or initial pressure drop x3 (whichever is lower). Another way to specify the lifetime of the filter is described in the guideline VDI 6022. This method is derived from hygienic concerns and recommends filter change after 1 year for the first filter stage.

END OF LIFE

Construction of the Hi-Flo XLS makes the filter suitable for one-time use only. Moreover, filter fixed assembly is a limiting factor to dismount specific parts of the product. The recommended method of disposal of the filter with a plastic frame is incineration, which takes place in certified facilities.

SUSTAINABILITY

The mission of Camfil is to protect the health of people, processes & the environment, hence the organization has been sustainable from day one of its inception. Camfil is committed to sustainability from design to delivery and across the complete product life cycle. Complex information about how Camfil addresses environmental concerns are described on the website and can be found in the section Sustainability.

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CAMFIL – A GLOBAL LEADER IN AIR FILTERS AND CLEAN AIR SOLUTIONS.

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We firmly believe that the best solutions for our customers are the best solutions for our planet, too. That's why every step of the way – from design to delivery and across the product life cycle – we consider the impact of what we do on people and on the world around us. Through a fresh approach to problem-solving, innovative design, precise process control and a strong customer focus we aim to conserve more, use less and find better ways – so we can all breathe easier.

The Camfil Group is headquartered in Stockholm, Sweden, and has manufacturing sites, R&D centres and local sales offices worldwide, and are growing. We proudly serve and support customers in a wide variety of industries and in communities across the world. To discover how Camfil can help you to protect people, processes and the environment, visit us at ↴

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