

ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A2

Owner of the Declaration	Etex Building Performance International
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-ETE-20240054-IBA1-EN
Issue date	19.12.2024
Valid to	18.12.2029

PROMALIGHT® MACHINED PARTS PROMAT

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ECO PLATFORM

EPD
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1. General Information

PROMAT

Programme holder

IBU – Institut Bauen und Umwelt e.V.
 Hegelplatz 1
 10117 Berlin
 Germany

Declaration number

EPD-ETE-20240054-IBA1-EN

This declaration is based on the product category rules:

Mineral insulating materials, 01.08.2021
 (PCR checked and approved by the SVR)

Issue date

19.12.2024

Valid to

18.12.2029



Dipl.-Ing. Hans Peters
 (Chairman of Institut Bauen und Umwelt e.V.)



Florian Pronold
 (Managing Director Institut Bauen und Umwelt e.V.)

PROMALIGHT® MACHINED PARTS

Owner of the declaration

Etex Building Performance International
 Rue Marcel Demonque 500
 84915 Avignon Cedex 9
 France

Declared product / declared unit

1 kg of PROMALIGHT® machined parts microporous insulation

Scope:

This EPD is representative for the PROMALIGHT® MACHINED PARTS, produced by MICROTHERM® (part of ETEX group) in Sint-Niklaas, Belgium.
 The reference product used for this EPD is the PROMALIGHT®1000R and 1000R HY with a density of 350 and 420 kg/m³, respectively. These grades are used as pre-materials for machined parts' production. The additional cutting/shaping to produce the machined parts from these pre-materials has been included.
 The owner of the declaration shall be liable for the underlying information and evidence; the IBU shall not be liable with respect to manufacturer information, life cycle assessment data and evidences.

The EPD was created according to the specifications of EN 15804+A2. In the following, the standard will be simplified as *EN 15804*.

Verification

The standard EN 15804 serves as the core PCR	
Independent verification of the declaration and data according to ISO 14025:2011	
<input type="checkbox"/>	internally
<input checked="" type="checkbox"/>	externally



Mr Marcel Gómez,
 (Independent verifier)

2. Product

2.1 Product description/Product definition

PROMALIGHT®-1000R and -1000R HY are lightweight microporous insulation boards which are used as pre-materials for machined parts (i.e. 100% custom made from selection of material grade right through to product finishing). Both PROMALIGHT®-1000R and PROMALIGHT®-1000R HY have the same formulation except the use of fumed silica in 1000R and hydrophobic fumed silica in 1000R-HY. HY silica makes the material water repellent, so the water cannot penetrate the material and so does not damage the material and change the thermal performance.

No EN or ETA norm for microporous products in general and for PROMALIGHT® range in particular as these products are rarely used in building & construction. For the application and use the respective national provisions apply.

2.2 Application

PROMALIGHT® MACHINED PARTS are accurately pre-machined microporous insulation components based on the PROMALIGHT® range of products. Microporous insulation offers extremely low thermal conductivity, close to the lowest theoretically possible at high temperatures. Microporous materials are the preferred choice when a large temperature reduction is required within a limited space, or when strict heat loss or surface temperature requirements are specified.

- **HEAVY Industry**
Compact high temperature protection
Data loggers (protection of electronic components)
Complex assemblies
- **ENERGY**
Fuel cell reformers (SOFC)
Thermal batteries
- **TRANSPORTATION**
Black box and VDR (Voyage Data Recorder) for air, rail, and marine
Complex assemblies

2.3 Technical Data

Technical data

Name	Value	Unit
Thermal conductivity at 200 °C - 800 °C (ISO 8302, ASTM C177)	0.022 - 0.034	W/(mK)
Gross density	350 and 420	kg/m ³
Compressive strength ASTM C165	>0.32	N/mm ²

Performance data of the product with respect to its characteristics in accordance with the relevant technical provision (no CE-marking)

2.4 Delivery status

PROMALIGHT® 1000R and 1000R HY grades are used as the pre-materials for machined parts production. The PROMALIGHT® - machined parts are 100% tailor-made and are produced in different sizes and shapes, depending on the customer's request.

2.5 Base materials/Ancillary materials

Main constituents:

- Fumed silica
- Rutile
- Glass fiber

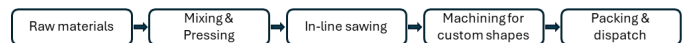
This product/article/at least one partial article contains substances listed in the *candidate list* (date: 16.12.2022) exceeding 0.1 percentage by mass: no

This product/article/at least one partial article contains other carcinogenic, mutagenic, reprotoxic (CMR) substances in categories 1A or 1B which are not on the *candidate list*, exceeding 0.1 percentage by mass: no

Biocide products were added to this construction product or it has been treated with biocide products (this then concerns a treated product as defined by the (EU) Ordinance on Biocide Products No. 528/2012): no

2.6 Manufacture

PROMALIGHT® insulation boards are produced on a fully integrated and automated press. The raw materials are mixed in multiple mix vessels. The mix is then fed into the mold and pressed into boards. The boards are then sawn to final standard size. PROMALIGHT® MACHINED PARTS are 100% custom made. For the machined parts, it requires additional machining processes of the naked boards to get the custom required output shapes. If some additional shaping is required, this will be done either manually with hand tools or using stationary wood or metal processing machinery. Finally, the output products are packed and dispatched to the end user.



2.7 Environment and health during manufacturing

Environmental, occupational health, safety and quality management at the Sint-Niklaas plant are in accordance with the following standards:

- ISO 14001:2015
- ISO 9001:2015
- ISO 45001:2018

2.8 Product processing/Installation

Not considered in the scope of the EPD, as a wide range of different applications and installation scenarios can be applied.

2.9 Packaging

A wooden pallet, carton and plastic packaging are used to pack the product for transport to the installation/customer.

2.10 Condition of use

No maintenance is needed.

2.11 Environment and health during use

Under normal conditions of use, the product does not cause any adverse health effects or release of volatile organic compounds (VOCs) into indoor air. No environmental impact on water, air or soil is expected due to the extremely low metal release from the low maintenance requirements.

2.12 Reference service life

The reference service life is not declared, as the EPD does not cover the use stage. The RSL depends on the application. Under normal conditions of use, the product is supposed to retain its characteristics as long as the application lasts.

2.13 Extraordinary effects

Fire

All microporous products are A1 non-combustible according EN13501,

Fire protection

Name	Value
Building material class	A1
Burning droplets	Not available
Smoke gas development	Not available

Water

Tests on product performance including possible impacts on the environment following the unforeseeable influence of water, e.g. flooding showed that no risks are expected to occur in terms of environmental and human health.

Mechanical destruction

In the case of mechanical destruction, no risks are expected to occur in terms of environment and human health.

2.14 Re-use phase

No reuse/recycling has been considered.

2.15 Disposal

Waste from these materials may be generally disposed off at a landfill, which has been licensed for this purpose. Please refer to the European list (Decision N° 2000/532/CE as modified) to identify your appropriate waste number, and ensure national and/or regional regulations are complied with.

Unless wetted, such a waste is normally dusty and so should be properly sealed in containers for disposal. At some authorised disposal sites, dusty waste may be treated differently in order to ensure they are dealt with promptly to avoid them being windblown. Check for any national and/or regional regulations, which may apply.

2.16 Further information

Additional information on PROMALIGHT® panels can be found at:

<https://www.promat.com/en-gb/industry/products-solutions/high-temperature-insulation/rigid-panels/promalight-machined-parts/>

3. LCA: Calculation rules

3.1 Declared Unit

1 kg of a PROMALIGHT® machined parts based on PROMALIGHT®1000R and 1000R HY as pre-materials for machined parts microporous insulations.

Declared unit

Name	Value	Unit
Declared unit	1	kg
Gross density	350	kg/m ³
Conversion factor to 1 kg	1	-

PROMALIGHT® Machined parts are 100% tailor made from selection of material grade right through to product finishing. It has been decided to define 1 kg instead of 1 m² as the declared unit. PROMALIGHT® Machined parts are sold in a wide variety of shapes and thicknesses, based on the customer's needs. By declaring 1 kg of the product and assuming proportionality between the mass and its environmental impact, the user can recalculate the impact per piece of machined part using the following formula:

$$E = W * E_{ref}$$

E = environmental impact of a product with weight W

W = weight of 1 piece of machined part

E_{ref} = environmental impact of the reference product

The PROMALIGHT® machined products come in two gross densities, 350 kg/m³ (1000R) and 420 kg/m³ (1000R HY). The formulation for both density is exactly the same, except the first one uses fumed silica and the later one uses hydrophobic fumed silica. Due to lack of inventory data for fumed silica in Ecoinvent, custom modelled data has been used for both. The declared gross density of 350 kg/m³ is the worst-case scenario, and hence, no variability assessment has been done.

3.2 System boundary

Cradle to gate - with options, including modules A5 (only packaging waste), C1-C4 and D.

The production happens in Belgium and the product is use (and end of life of the product and final product packaging) is valid in the European market.

3.3 Estimates and assumptions

No data record for (hydrophobic) fumed silica is available in Ecoinvent. Therefore, a customized model has been used, based on the stoichiometry of the chemical reaction and energy consumption provided by ETEX's supplier. During the production of fumed silica, Hydrogen chloride (HCl) is produced as a co-product. Impacts have been allocated on an economic basis to both end products (fumed silica and HCl).

3.4 Cut-off criteria

The following processes are considered below cut-off:

- Transport of packaging of raw materials
- Transport of packaging final product
- Infrastructure and land use of the factory
- Ancillary materials used during the manufacturing
- Environmental impacts caused by the personnel of the production plants are not included in the LCA, e.g. waste from the cafeteria and sanitary installations, accidental pollution caused by human mistakes, or environmental effects caused by commuter traffic. Heating or cooling of the plants in order to ensure a comfortable indoor climate for the personnel for example is also neglected.

More than 95% of materials and energy per module, and more than 99% of the total life cycle materials and energy are included.

3.5 Background data

Ecoinvent 3.9.1 and Industry 2.0

3.6 Data quality

Company-specific data concerns the data about the production of PROMALIGHT® 1000R and PROMALIGHT®-1000R HY as pre-materials used for machined parts' production. All required data about the production process have been delivered to Enperas by ETEX. Enperas uses publicly available generic data for all background processes (Ecoinvent 3.9.1 and Industry 2.0).

The composed datasets for this project are representative and relevant for PROMALIGHT® 1000R and 1000R HY which are pre-materials for machined parts produced by Microtherm in Sint-Niklaas, Belgium.

Data are as much as possible representative for the modern state-of-technology. The data collected by ETEX are based on data from the year 2021.

The ETEX production plant purchases hydropower, so the electricity consumption has been modelled using Ecoinvent 3.9.1 data record 'Electricity, high voltage | electricity production, hydro, reservoir, alpine region | Cut-off, U'. Scoring from 1 to 5 (from very good, good, fair, poor, to very poor) has been adopted according to the EN 15804+A2:2019 at Annex E (table E.2). The data quality rating (comprising Geographical, technology and temporal aspects) for the identified important materials/processes ranges from 1,3 to 2,3 and 1,3 to 1,6 for the most relevant primary and generic data respectively.

3.7 Period under review

The data collected by ETEX are based on data from the year 2021.

3.8 Geographic Representativeness

Land or region, in which the declared product system is manufactured, used or handled at the end of the product's lifespan: Europe

3.9 Allocation

No co-products are produced.
No secondary raw materials are used.

The following allocations have been considered for the production data:

- For the energy consumption specific data per production step was available. The productions steps have been divided in steps that are common to all the products produced in the plant in Sint-Niklaas (i.e. quality control

and miscellaneous variants) and steps for which specific data is available for the different products (i.e. mixing, pressing, sawing and shrink-wrapping and machined parts' finishing). The energy consumptions of the common production steps have been allocated to the individual product using the total annual production volume of the factory (physical relationship, kg). The energy consumption of the specific steps have been allocated to the individual product using the annual production volume of the respective product (physical relationship, kg). For the total energy consumption the consumption of the common steps per declared unit and the consumption of the specific steps per declared unit of the respective product have been added.

- The amount of raw materials is based on product specific data.
- Only facility level data were available for the production waste. The production waste have been allocated to the individual product using the annual production volume of the factory (physical relationship, kg).
- Only facility level data were available for the packaging of the final product. The total amount of purchased packaging materials were allocated to 1 kg of product using the annual production volume of the products materials (physical relationship, kg).

3.10 Comparability

Basically, a comparison or an evaluation of EPD data is only possible if all the data sets to be compared were created according to EN 15804 and the building context, respectively the product-specific characteristics of performance, are taken into account.

The used background database has to be mentioned.

4. LCA: Scenarios and additional technical information

Characteristic product properties of biogenic carbon

The product does not contain biogenic carbon. Its accompanying packaging contains biogenic carbon in the form of wooden pallets, core boards and carton. Note: 1 kg of biogenic Carbon is equivalent to 44/12 kg of CO₂.

Information describing the biogenic Carbon Content at factory gate

Name	Value	Unit
Biogenic carbon content in product	-	kg C
Biogenic carbon content in accompanying packaging	0.0237	kg C

Module A1-A5

In A1&A2, the amount of raw material and the packaging of raw materials per declared unit, along with the transport mode and distance transported per raw materials have been considered.

In module A3, the site specific foreground data for energy and consumables have been accounted. The production process (in fact the whole plant) uses 100% certified green electricity.

Module A4 is not included in the scope of this study.

Only packaging waste is included in module A5. As different

applications and installation scenarios can be applied, the installation scenario itself is not included. The European EoL scenarios, based on the PEF CR Annex C, has been used, for the three packaging materials of wood pallets (32% incineration, & 30% Recycling, and rest landfilled), carton (75% recycle, 11% incineration, and rest landfilled) and PE (29% recycle, 32% incineration and rest landfilled).

End of life (C1 - C4) and Module D

Module C1 is assumed to have zero activity. A 100% landfill scenario is considered as the average European scenario for PROMALIGHT® range. Thus in C2, a distance of 50 km has been considered for landfill.

No benefits and loads regarding the product are allocated to module D, as the product is 100 % landfilled. However, some minor benefits and loads regarding the packaging of the product are allocated to module D.

Name	Value	Unit
Collected separately waste type waste type	-	kg
Collected as mixed construction waste	1	kg
Reuse	-	kg
Recycling	-	kg
Energy recovery	-	kg
Landfilling	1	kg

5. LCA: Results

Note that only packaging waste is included in module A5. As different applications and installation scenarios can be applied, the installation scenario itself is not included.

DESCRIPTION OF THE SYSTEM BOUNDARY (X = INCLUDED IN LCA; MND = MODULE OR INDICATOR NOT DECLARED; MNR = MODULE NOT RELEVANT)

Product stage			Construction process stage		Use stage							End of life stage				Benefits and loads beyond the system boundaries
Raw material supply	Transport	Manufacturing	Transport from the gate to the site	Assembly	Use	Maintenance	Repair	Replacement	Refurbishment	Operational energy use	Operational water use	De-construction demolition	Transport	Waste processing	Disposal	Reuse-Recovery-Recycling-potential
A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
X	X	X	X	X	MND	MND	MNR	MNR	MNR	MND	MND	X	X	X	X	X

RESULTS OF THE LCA - ENVIRONMENTAL IMPACT according to EN 15804+A2: 1 kg PROMALIGHT® machined parts microporous insulation

Parameter	Unit	A1-A3	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
GWP-total	kg CO ₂ eq	1.57E+00	1.46E+00	4.1E-02	6.51E-02	0	1.15E-01	0	1.48E-02	0	7.38E-03	-5.94E-02
GWP-fossil	kg CO ₂ eq	1.63E+00	1.46E+00	4.1E-02	1.29E-01	0	3.35E-02	0	1.48E-02	0	7.37E-03	-3.22E-02
GWP-biogenic	kg CO ₂ eq	-6.24E-02	1.46E-03	1.3E-05	-6.39E-02	0	8.16E-02	0	4.76E-06	0	1.05E-05	-2.72E-02
GWP-luluc	kg CO ₂ eq	1.84E-03	1.63E-03	2E-05	1.95E-04	0	1.33E-06	0	7.3E-06	0	4.49E-06	-2.96E-05
ODP	kg CFC11 eq	1.58E-07	1.54E-07	8.87E-10	2.99E-09	0	7.9E-11	0	3.22E-10	0	2.28E-10	-7.07E-10
AP	mol H ⁺ eq	5.83E-03	5.26E-03	1.33E-04	4.46E-04	0	1.57E-05	0	3.23E-05	0	4.76E-05	-1.06E-04
EP-freshwater	kg P eq	8.32E-05	7.77E-05	3.29E-07	5.19E-06	0	3.13E-08	0	1.2E-07	0	1.67E-07	-9.86E-07
EP-marine	kg N eq	1.28E-03	1.12E-03	4.52E-05	1.22E-04	0	7.01E-06	0	7.95E-06	0	1.84E-05	-2.06E-05
EP-terrestrial	mol N eq	1.41E-02	1.23E-02	4.83E-04	1.28E-03	0	6.87E-05	0	8.28E-05	0	1.99E-04	-2.32E-04
POCP	kg NMVOC eq	5.1E-03	4.41E-03	1.99E-04	5E-04	0	2.41E-05	0	5.02E-05	0	7.63E-05	-1.04E-04
ADPE	kg Sb eq	1.58E-05	1.54E-05	1.31E-07	2.58E-07	0	8.7E-09	0	4.83E-08	0	2.26E-08	-1.38E-07
ADPF	MJ	2.98E+01	2.62E+01	5.8E-01	3.05E+00	0	4.08E-02	0	2.1E-01	0	1.79E-01	-8.69E-01
WDP	m ³ world eq deprived	1.55E+00	1.33E+00	2.37E-03	2.14E-01	0	2.54E-04	0	8.66E-04	0	8.72E-04	-1.54E-02

GWP = Global warming potential; ODP = Depletion potential of the stratospheric ozone layer; AP = Acidification potential of land and water; EP = Eutrophication potential; POCP = Formation potential of tropospheric ozone photochemical oxidants; ADPE = Abiotic depletion potential for non-fossil resources; ADPF = Abiotic depletion potential for fossil resources; WDP = Water (user) deprivation potential

RESULTS OF THE LCA - INDICATORS TO DESCRIBE RESOURCE USE according to EN 15804+A2: 1 kg PROMALIGHT® machined parts microporous insulation

Parameter	Unit	A1-A3	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
PERE	MJ	2.86E+01	2.24E+00	8.87E-03	2.63E+01	0	8.81E-01	0	3.25E-03	0	9.35E-03	-2.17E-01
PERM	MJ	1.14E+00	1.48E-01	0	9.92E-01	0	-1.14E+00	0	0	0	0	5.49E-01
PERT	MJ	2.97E+01	2.39E+00	8.87E-03	2.73E+01	0	-2.59E-01	0	3.25E-03	0	9.35E-03	3.32E-01
PENRE	MJ	2.98E+01	2.72E+01	5.81E-01	2.04E+00	0	4.62E-01	0	2.1E-01	0	1.79E-01	-2.14E+00
PENRM	MJ	8.92E+00	1.59E-01	0	8.76E+00	0	-8.92E+00	0	0	0	0	2.57E+00
PENRT	MJ	3.11E+01	2.73E+01	5.81E-01	3.19E+00	0	-3.32E-01	0	2.1E-01	0	1.79E-01	4.31E-01
SM	kg	0	0	0	0	0	0	0	0	0	0	0
RSF	MJ	0	0	0	0	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0	0	0	0	0
FW	m ³	2.32E-01	3.59E-02	7.75E-05	1.96E-01	0	2.72E-05	0	2.83E-05	0	1.92E-04	-2.94E-04

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources used as raw materials; PENRT = Total use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; NRSF = Use of non-renewable secondary fuels; FW = Use of net fresh water

RESULTS OF THE LCA - WASTE CATEGORIES AND OUTPUT FLOWS according to EN 15804+A2: 1 kg PROMALIGHT® machined parts microporous insulation

Parameter	Unit	A1-A3	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
HWD	kg	7.97E-05	7.14E-05	3.7E-06	4.66E-06	0	2.53E-07	0	1.34E-06	0	7.88E-07	-1.1E-06
NHWD	kg	3.07E-01	1.41E-01	2.83E-02	1.38E-01	0	3.31E-02	0	1.04E-02	0	1E+00	-1.76E-03
RWD	kg	8.29E-05	7.98E-05	1.89E-07	2.98E-06	0	3.49E-08	0	6.9E-08	0	2.48E-07	-1.18E-06
CRU	kg	0	0	0	0	0	0	0	0	0	0	0

MFR	kg	6.42E-03	0	0	6.42E-03	0	2.69E-02	0	0	0	0	0
MER	kg	0	0	0	0	0	0	0	0	0	0	0
EEE	MJ	1.47E-02	0	0	1.47E-02	0	6.42E-02	0	0	0	0	0
EET	MJ	2.93E-02	0	0	2.93E-02	0	1.28E-01	0	0	0	0	0

HWD = Hazardous waste disposed; NHWD = Non-hazardous waste disposed; RWD = Radioactive waste disposed; CRU = Components for re-use; MFR = Materials for recycling; MER = Materials for energy recovery; EEE = Exported electrical energy; EET = Exported thermal energy

**RESULTS OF THE LCA – additional impact categories according to EN 15804+A2-optional:
1 kg PROMALIGHT® machined parts microporous insulation**

Parameter	Unit	A1-A3	A1	A2	A3	A4	A5	C1	C2	C3	C4	D
PM	Disease incidence	6.68E-08	5.57E-08	3.24E-09	7.9E-09	0	2.88E-10	0	1.1E-09	0	1.04E-09	-1.04E-09
IR	kBq U235 eq	9.66E-02	9.12E-02	2.9E-04	5.14E-03	0	3.75E-05	0	1.06E-04	0	3.26E-04	-1.48E-03
ETP-fw	CTUe	7.1E+00	6.12E+00	2.87E-01	6.97E-01	0	2.82E-02	0	1.04E-01	0	6.82E-02	-5.8E-02
HTP-c	CTUh	7.35E-10	5.41E-10	1.86E-11	1.76E-10	0	9.39E-12	0	6.74E-12	0	3.09E-12	-1.14E-11
HTP-nc	CTUh	1.77E-08	1.64E-08	4.09E-10	8.46E-10	0	6.14E-11	0	1.49E-10	0	5.15E-11	-2.05E-10
SQP	SQP	3.68E+01	3E+01	3.46E-01	6.42E+00	0	3.7E-02	0	1.27E-01	0	3.18E-01	-1.25E+00

PM = Potential incidence of disease due to PM emissions; IR = Potential Human exposure efficiency relative to U235; ETP-fw = Potential comparative Toxic Unit for ecosystems; HTP-c = Potential comparative Toxic Unit for humans (cancerogenic); HTP-nc = Potential comparative Toxic Unit for humans (not cancerogenic); SQP = Potential soil quality index

Disclaimer 1 – for the indicator “Potential Human exposure efficiency relative to U235”. This impact category deals mainly with the eventual impact of low-dose ionizing radiation on human health of the nuclear fuel cycle. It does not consider effects due to possible nuclear accidents, occupational exposure or radioactive waste disposal in underground facilities. Potential ionizing radiation from the soil, radon and from some construction materials is also not measured by this indicator.

Disclaimer 2 – for the indicators “abiotic depletion potential for non-fossil resources”, “abiotic depletion potential for fossil resources”, “water (user) deprivation potential, deprivation-weighted water consumption”, “potential comparative toxic unit for ecosystems”, “potential comparative toxic unit for humans – cancerogenic”, “Potential comparative toxic unit for humans - not cancerogenic”, “potential soil quality index”. The results of this environmental impact indicator shall be used with care as the uncertainties on these results are high as there is limited experience with the indicator.

6. LCA: Interpretation

For PROMALIGHT® machined parts produced in Belgium, the raw materials used in the formulation mix has the highest contribution on all impact categories, and more specific the

fumed silica. Module D is not significant as the product is not recycled nor incinerated.

7. Requisite evidence

No evidence is required

8. References

Standards

EN15804

EN 15804:2012+A2:2019+AC:2021, Sustainability of construction works — Environmental Product Declarations — Core rules for the product category of construction products.

EN16757

EN 16757:2017, Sustainability of construction works— Environmental product declarations – Product Category Rules for concrete and concrete elements

ISO 9001

ISO 9001:2015: Quality management systems — Requirements

ISO 14001

ISO 14001:2015: Environmental management systems — Requirements with guidance for use

ISO 14020

ISO 14020:2022: Environmental statements and programme for products

ISO 14025

EN ISO 14025:2011, Environmental labels and declarations — Type III environmental declarations — Principles and procedures.

ISO 14040

ISO 14040:2006: Environmental management – Life cycle assessment – Principles and framework.

ISO 14044

ISO 14044:2006: Environmental management – Life cycle assessment – Requirements and guidelines.

ISO 45001

ISO 45001:2018: Occupational health and safety management systems Requirements with guidance for use

PCR Part A

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ECHA, REACH Candidate List of substances of very high concern for Authorisation

The literature referred to in the Environmental Product Declaration must be listed in full. Standards already fully quoted in the EPD do not need to be listed here again.

The current version of PCR Part A and PCR Part B of the PCR document on which they are based must be referenced.



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