

ENVIRONMENTAL PRODUCT DECLARATION

as per ISO 14025 and EN 15804+A2

Owner of the Declaration	Hilti Aktiengesellschaft
Publisher	Institut Bauen und Umwelt e.V. (IBU)
Programme holder	Institut Bauen und Umwelt e.V. (IBU)
Declaration number	EPD-HIL-20240594-CBA1-DE
Issue date	19/03/2025
Valid to	18/03/2030

Hilti Refrigeration Pipe Clamps Hilti AG

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General Information

Hilti AG

Programme holder

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

Declaration number

EPD-HIL-20240594-CBA1-DE

This declaration is based on the product category rules:

Connection, assembly and installation systems, 01/08/2021
(PCR checked and approved by the SVR)

Issue date

19/03/2025

Valid to

18/03/2030

Dipl.-Ing. Hans Peters
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(Managing Director Institut Bauen und Umwelt e.V.)

Hilti Refrigeration Pipe Clamps

Owner of the declaration

Hilti Aktiengesellschaft
Feldkircher Strasse 100
9494 Schaan
Liechtenstein

Declared product / declared unit

MP-KF 170-609/ 1kg

Scope:

This document relates to the MP-KF 170-609 as a representative product for the Refrigeration pipe clamp product group designed and sold by Hilti AG. The Refrigeration pipe clamp product group refers to round shaped fastening elements made with thick polymer insulation material and steel to clamp chilled water, refrigeration, and air conditioning pipes in residential and industrial construction. There are various types within the product group, and the different types are produced in outsourced locations in Poland, Switzerland, Serbia, China, Spain, and Germany. This EPD is a representative EPD, where the supplier is selected as the representative supplier due to highest production volume in 2022, and the product MP-KF 170-609 is selected as declared product, because it has the highest net weight amongst the products produced by that supplier.

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

Mrs Kim Allbury,
(Independent verifier)

Product

Product description/Product definition

The MP-KF 170-609 is designed as a fastening clamp to fix chilled pipes of various materials and sizes. It is intended to be fixed onto Hilti modular support systems or directly to the base materials in connection with threaded rods, base plates, anchors or beam clamps. The pipe clamp consists of two profiled steel bands which are integrated into high-density insulation material. The clamping bands are connected (together) on both sides by a steel screw and a nut. The clamping bands moulded into the insulation material are pressed onto the outside of the pipe to be fastened by tightening the screws. The steel bands are electro-galvanized for indoor use.

The individual Pipe clamps with inlay items under this group and represented by MP-KF 170-609 are as listed below:

Item designation	Item designation	Item designation
MRP-C 13/10	MRP-C 13/32	MRP-C 13/75
MRP-C 13/12	MRP-C 13/33	MRP-C 13/76
MRP-C 13/14	MRP-C 13/35	MRP-C 13/88
MRP-C 13/15	MRP-C 13/40	MRP-C 13/90
MRP-C 13/16	MRP-C 13/42	MRP-C 13/108
MRP-C 13/17	MRP-C 13/48	MRP-C 13/110
MRP-C 13/18	MRP-C 13/50	MRP-C 13/114
MRP-C 13/20	MRP-C 13/54	MRP-C 13/125
MRP-C 13/21	MRP-C 13/57	MRP-C 13/133
MRP-C 13/22	MRP-C 13/60	MRP-C 13/140
MRP-C 13/25	MRP-C 13/63	MRP-C 13/160
MRP-C 13/26	MRP-C 13/64	MRP-C 13/168
MRP-C 13/28	MRP-C 13/66	
MRP-C 19/10	MRP-C 19/33	MRP-C 19/88
MRP-C 19/12	MRP-C 19/35	MRP-C 19/90
MRP-C 19/14	MRP-C 19/40	MRP-C 19/108
MRP-C 19/15	MRP-C 19/42	MRP-C 19/110
MRP-C 19/16	MRP-C 19/48	MRP-C 19/114
MRP-C 19/17	MRP-C 19/50	MRP-C 19/125
MRP-C 19/18	MRP-C 19/54	MRP-C 19/133
MRP-C 19/20	MRP-C 19/57	MRP-C 19/140
MRP-C 19/21	MRP-C 19/60	MRP-C 19/160
MRP-C 19/22	MRP-C 19/63	MRP-C 19/168
MRP-C 19/25	MRP-C 19/64	MRP-C 19/180
MRP-C 19/26	MRP-C 19/66	MRP-C 19/200
MRP-C 19/28	MRP-C 19/75	MRP-C 19/219
MRP-C 19/32	MRP-C 19/76	
MRP-C 25/10	MRP-C 25/33	MRP-C 25/88
MRP-C 25/12	MRP-C 25/35	MRP-C 25/90
MRP-C 25/14	MRP-C 25/40	MRP-C 25/108
MRP-C 25/15	MRP-C 25/42	MRP-C 25/110
MRP-C 25/16	MRP-C 25/48	MRP-C 25/114
MRP-C 25/17	MRP-C 25/50	MRP-C 25/125
MRP-C 25/18	MRP-C 25/54	MRP-C 25/133
MRP-C 25/20	MRP-C 25/57	MRP-C 25/140
MRP-C 25/21	MRP-C 25/60	MRP-C 25/160
MRP-C 25/22	MRP-C 25/63	MRP-C 25/168
MRP-C 25/25	MRP-C 25/64	MRP-C 25/180
MRP-C 25/26	MRP-C 25/66	MRP-C 25/200
MRP-C 25/28	MRP-C 25/75	MRP-C 25/219
MRP-C 25/32	MRP-C 25/76	

Item designation	Item designation	Item designation
MRP-C 32/10	MRP-C 32/35	MRP-C 32/104
MRP-C 32/12	MRP-C 32/40	MRP-C 32/108
MRP-C 32/14	MRP-C 32/42	MRP-C 32/110
MRP-C 32/15	MRP-C 32/48	MRP-C 32/114
MRP-C 32/16	MRP-C 32/50	MRP-C 32/125
MRP-C 32/17	MRP-C 32/54	MRP-C 32/128
MRP-C 32/18	MRP-C 32/57	MRP-C 32/133
MRP-C 32/20	MRP-C 32/60	MRP-C 32/140
MRP-C 32/21	MRP-C 32/63	MRP-C 32/154
MRP-C 32/22	MRP-C 32/64	MRP-C 32/160
MRP-C 32/25	MRP-C 32/66	MRP-C 32/168
MRP-C 32/26	MRP-C 32/75	MRP-C 32/180
MRP-C 32/28	MRP-C 32/76	MRP-C 32/200
MRP-C 32/32	MRP-C 32/88	MRP-C 32/204
MRP-C 32/33	MRP-C 32/90	MRP-C 32/219
MIP-H/10-13	MIP-H/45	MIP-H/102
MIP-H/15-18	MIP-H/48	MIP-H/108
MIP-H/21-25	MIP-H/54-57	MIP-H/114
MIP-H/27-30	MIP-H/60-64	MIP-H/133-140
MIP-H/34-38	MIP-H/76-80	MIP-H/159-160
MIP-H/42	MIP-H/89	MIP-H/165-168
MIP-M/10-12	MIP-M/60-64	MIP-M/165-168
MIP-M/15-18	MIP-M/76-80	MIP-M/216-219
MIP-M/21-25	MIP-M/89	MIP-M/267-273
MIP-M/27-30	MIP-M/102-108	MIP-M/324
MIP-M/34-38	MIP-M/114	MIP-M/356
MIP-M/42-45	MIP-M/133	MIP-M/406
MIP-M/48	MIP-M/140	MIP-M/457
MIP-M/54-57	MIP-M/159-160	
MIP-T/10-12	MIP-T/42-45	MIP-T/89
MIP-T/15-18	MIP-T/48	MIP-T/102-108
MIP-T/21	MIP-T/54	MIP-T/114
MIP-T/25	MIP-T/57	MIP-T/133-140
MIP-T/27-30	MIP-T/60	MIP-T/159-160
MIP-T/34-35	MIP-T/64	MIP-T/165-168
MIP-T/38	MIP-T/76-80	MIP-T/216-219
MRP-KF 12	MRP-KF 42	MRP-KF 108
MRP-KF 16	MRP-KF 48	MRP-KF 114
MRP-KF 17	MRP-KF 50	MRP-KF 133
MRP-KF 18	MRP-KF 54	MRP-KF 139
MRP-KF 21	MRP-KF 57	MRP-KF 159
MRP-KF 22	MRP-KF 60	MRP-KF 168
MRP-KF 27	MRP-KF 64	MRP-KF 204
MRP-KF 28	MRP-KF 70	MRP-KF 219
MRP-KF 33	MRP-KF 76	
MRP-KF 35	MRP-KF 89	

Item designation	Item designation	Item designation
MP-KF 170-219	MP-KF 170-356	MP-KF 170-457
MP-KF 170-273	MP-KF 170-368	MP-KF 170-508
MP-KF 170-324	MP-KF 170-406	MP-KF 170-609
MFP-KF 76 set	MFP-KF 168 set	MFP-KF 406 set
MFP-KF 89 set	MFP-KF 219 set	MFP-KF 457 set
MFP-KF 114 set	MFP-KF 273 set	MFP-KF 508 set
MFP-KF 133 set	MFP-KF 324 set	MFP-KF 609 set
MFP-KF 140 set	MFP-KF 356 set	
MFP-KF 159 set	MFP-KF 368 set	
MI-CF 10/20	MI-CF 34/20	MI-CF 60/20
MI-CF 15/20	MI-CF 42/20	MI-CF 64/20
MI-CF 17/20	MI-CF 48/20	MI-CF 76/20
MI-CF 21/20	MI-CF 54/20	MI-CF 89/20
MI-CF 27/20	MI-CF 57/20	MI-CF 108/20
MI-CF 21/25	MI-CF 42/25	MI-CF 76/25
MI-CF 27/25	MI-CF 48/25	
MI-CF 34/25	MI-CF 60/25	
MI-CF 21/30	MI-CF 42/30	MI-CF 60/30
MI-CF 27/30	MI-CF 48/30	MI-CF 76/30
MI-CF 34/30	MI-CF 54/30	MI-CF 89/30
MI-CF 21/40	MI-CF 48/40	MI-CF 89/40
MI-CF 27/40	MI-CF 54/40	MI-CF 76/40 M10/M12
MI-CF 34/40	MI-CF 60/40	MI-CF 89/40 M10/M12
MI-CF 42/40	MI-CF 76/40	
MI-CF 48/50	MI-CF 89/50	MI-CF 89/50 M10/M12
MI-CF 60/50	MI-CF 60/50 M10/M12	
MI-CF 76/50	MI-CF 76/50 M10/M12	
MI-CF 57/20 LS	MI-CF 76/20 LS	MI-CF 108/20 LS
MI-CF 60/20 LS	MI-CF 89/20 LS	MI-CF 114/20 LS
MI-CF 60/30 LS	MI-CF 133/30 LS	MI-CF 219/30 LS
MI-CF 76/30 LS	MI-CF 140/30 LS	MI-CF 114/30 LS M10/M12
MI-CF 89/30 LS	MI-CF 159/30 LS	
MI-CF 114/30 LS	MI-CF 168/30 LS	
MI-CF 60/40 LS	MI-CF 140/40 LS	MI-CF 76/40 LS M10/M12
MI-CF 76/40 LS	MI-CF 159/40 LS	MI-CF 89/40 LS M10/M12
MI-CF 89/40 LS	MI-CF 168/40 LS	MI-CF 114/40 LS M10/M12
MI-CF 114/40 LS	MI-CF 219/40 LS	
MI-CF 133/40 LS	MI-CF 273/40 LS	
MI-CF 76/50 LS	MI-CF 159/50 LS	MI-CF 60/50 LS M10/M12
MI-CF 89/50 LS	MI-CF 168/50 LS	MI-CF 76/50 LS M10/M12
MI-CF 114/50 LS	MI-CF 219/50 LS	MI-CF 89/50 LS M10/M12
MI-CF 140/50 LS	MI-CF 273/50 LS	

For the placing of the product on the market in the European



Union European Free Trade Association EU/EFTA) (with the exception of Switzerland) *Regulation (EU) No. 305/2011 (CPR)* applies. For the application and use the respective national provisions apply.

Application

The MP-KF 170-609 is developed to clamp cold pipes of various materials and sizes. It is intended to be fixed onto Hilti modular support systems or onto base materials in connection with threaded rods, base plates, anchors or beam clamps. The product and the product group it represents are intended to be used for the following applications:

- Fixing of Chilled water pipes
- Fixing of Air conditioning pipes
- Fixing of Refrigeration pipes

Technical Data

The following data pertains to the selected product (MP-KF 170-609) only:

Constructional data

Name	Value	Unit
Width of material	848	mm
Diameter of material	609	mm
Weight of material	35.048	kg
Load resistance (max. recommended)	17000	N

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

Base materials/Ancillary materials

The raw material used to produce the declared product MP-KF 170-609 is Closed cell CFC-free polyurethan (PUR) 17.4%, steel 77.1%, other polymers 4.4%, and paper 1.1%. Per piece of item weighs 35.048 kg.

This product/article/at least one partial article contains substances listed in the *REACH SVHC* candidate list (date: 17.01.2023) 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.

Reference service life

This EPD does not declare the use stages (B1-B7). The lifetime of zinc coated (all galvanization types) steel will depend on the lifetime of the entire installation system with which it has been used in combination, the lifetime of the respective building, and the environmental conditions. Therefore, the service life is not declared in this declaration.

LCA: Calculation rules

Declared Unit

The declared product here is a refrigeration pipe clamp from HILTI AG with the designation MP-KF 170-609 as a representative product of the Refrigeration pipe clamp portfolio. The declared unit refers to 1 kg of the mounting system. The packaging, based on 1 kg, is also included in the calculation with 0,0417 kg. The following table shows the data of the declared unit.

Declared unit and mass reference

Name	Value	Unit
Declared unit (e.g. modular channel system)	1	kg
Gross density	1226	kg/m ³

System boundary

Type of EPD: Cradle to gate with options, modules C1–C4, and module D. The following information modules are defined as system boundaries in this study:

Production stage (A1- A3):

- A1, Raw material,
- A2, Transport to the manufacturer,
- A3, Production.

End of life (C1- C4):

- C1, Dismantling/demolition,
- C2, Transport,
- C3, Waste treatment,

- C4, Disposal.

Reuse, recovery and recycling potential (D)

To accurately record the indicators and environmental impacts of the declared unit, a total of nine information modules are considered. The information modules A1 to A3 cover the material provision, transport to the production site, and the production processes of the product itself. Information modules C1 to C4 cover the dismantling or demolition of the product from the building, transportation for waste disposal, waste treatment and final disposal of the product. Additionally, reuse, recovery and recycling potentials are addressed in information module D.

Geographic Representativeness

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

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 database referred to in this study is LCA for *Experts by Sphera*.

LCA: Scenarios and additional technical information

Characteristic product properties of biogenic carbon

The declared product does not contain any biogenic Carbon.

Information on describing the biogenic carbon content at factory gate



Name	Value	Unit
Biogenic carbon content in product	-	kg C
Biogenic carbon content in accompanying packaging	0.00321125	kg C

Note: 1 kg of biogenic carbon is equivalent to 44/12 kg of CO₂.

End of life (C1-C4)

In the C1 information module, the demolition of the mounting system from the building is calculated. Demolition is carried out by means of an electric screwdriver. The electrical energy consumption for the tool is assumed to be 0.003MJ for the declared unit. The electricity consumption is calculated with a

German electricity mix.

Name	Value	Unit
Collected as mixed construction waste	-	kg
Recycling	0.811	kg
Energy recovery	0.189	kg

Reuse, recovery and/or recycling potentials (D), relevant scenario information

A recycling rate of 95% is assumed in Module D and 85% in Module D1. Module D is intended to reflect a European recycling rate and D1 a global recycling rate.

Name	Value	Unit
Steel recycling (D)	0,770	kg
Steel recycling (D1)	0,689	kg

LCA: Results

LCA RESULTS - additional impact categories according to EN 15804+A2-optional are not declared as experience with the indicators is limited.'

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	MND	MND	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 Hilti Refrigeration Pipe Clamps

Parameter	Unit	A1-A3	C1	C2	C3	C4	D	D/1
GWP-total	kg CO ₂ eq	6E+00	5.41E-04	4.55E-03	4.32E-01	0	-2E+00	-1.81E+00
GWP-fossil	kg CO ₂ eq	5.99E+00	5.41E-04	4.59E-03	4.32E-01	0	-2E+00	-1.81E+00
GWP-biogenic	kg CO ₂ eq	5.14E-03	1.22E-07	-1.16E-04	-3.15E-07	0	-1.23E-03	-1.11E-03
GWP-luluc	kg CO ₂ eq	2.1E-03	8.09E-08	7.6E-05	2.26E-05	0	-7.61E-04	-6.83E-04
ODP	kg CFC11 eq	2.87E-11	5.94E-15	4.55E-16	1.28E-10	0	-3.19E-12	-2.97E-12
AP	mol H ⁺ eq	1.06E-02	1.26E-06	1.77E-05	3.44E-04	0	-4.18E-03	-3.77E-03
EP-freshwater	kg P eq	7.04E-06	2.83E-10	1.93E-08	2.67E-07	0	-1.53E-06	-1.38E-06
EP-marine	kg N eq	2.54E-03	2.12E-07	8.31E-06	1.62E-04	0	-1.06E-03	-9.52E-04
EP-terrestrial	mol N eq	2.72E-02	2.27E-06	9.3E-05	1.84E-03	0	-1.14E-02	-1.03E-02
POCP	kg NMVOC eq	7.89E-03	6.31E-07	1.64E-05	4.4E-04	0	-3.36E-03	-3.02E-03
ADPE	kg Sb eq	6.21E-06	2.56E-11	3.85E-10	6.24E-09	0	-6.12E-06	-5.47E-06
ADPF	MJ	6.98E+01	1E-02	5.9E-02	3.41E-01	0	-2.06E+01	-1.88E+01
WDP	m ³ world eq deprived	6.63E-02	3.09E-05	6.73E-05	4.22E-02	0	-3.26E-02	-2.97E-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 Hilti Refrigeration Pipe Clamps

Parameter	Unit	A1-A3	C1	C2	C3	C4	D	D/1
PERE	MJ	8.2E+00	1.43E-03	4.99E-03	3.89E-02	0	-1.58E+00	-1.44E+00
PERM	MJ	7.09E-01	0	0	0	0	0	0
PERT	MJ	8.91E+00	1.43E-03	4.99E-03	3.89E-02	0	-1.58E+00	-1.44E+00
PENRE	MJ	6.5E+01	1E-02	5.9E-02	5.16E+00	0	-2.06E+01	-1.88E+01
PENRM	MJ	4.82E+00	0	0	-4.82E+00	0	0	0
PENRT	MJ	6.98E+01	1E-02	5.9E-02	3.41E-01	0	-2.06E+01	-1.88E+01
SM	kg	5.9E-03	0	0	0	0	7.7E-01	6.89E-01
RSF	MJ	0	0	0	0	0	0	0
NRSF	MJ	0	0	0	0	0	0	0
FW	m ³	1.07E-02	2.01E-06	5.6E-06	1E-03	0	-1.63E-03	-1.5E-03

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 Hilti Refrigeration Pipe Clamps

Parameter	Unit	A1-A3	C1	C2	C3	C4	D	D/1
HWD	kg	9.1E-08	1.42E-12	1.91E-12	5.88E-11	0	-7.92E-08	-7.09E-08
NHWD	kg	5.91E-02	2.48E-06	9.18E-06	2.13E-03	0	-3.11E-02	-2.79E-02
RWD	kg	5.18E-04	1.3E-06	7.63E-08	1.46E-05	0	-3.63E-04	-3.5E-04
CRU	kg	0	0	0	0	0	0	0
MFR	kg	2.89E-01	0	0	8.11E-01	0	0	0
MER	kg	0	0	0	0	0	0	0
EEE	MJ	0	0	0	7.21E-01	0	0	0

EET	MJ	0	0	0	1.29E+00	0	0	0
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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 Hilti Refrigeration Pipe Clamps

Parameter	Unit	A1-A3	C1	C2	C3	C4	D	D/1
PM	Disease incidence	ND	ND	ND	ND	ND	ND	ND
IR	kBq U235 eq	ND	ND	ND	ND	ND	ND	ND
ETP-fw	CTUe	ND	ND	ND	ND	ND	ND	ND
HTP-c	CTUh	ND	ND	ND	ND	ND	ND	ND
HTP-nc	CTUh	ND	ND	ND	ND	ND	ND	ND
SQP	SQP	ND	ND	ND	ND	ND	ND	ND

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.

References

Candidate List of substances of very high concern for Authorisation

European Chemicals Agency (ECHA), in accordance with Article 50(10) of the REACH regulation

European Waste code

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