Product Environmental Profile



Eaton Crouse-Hinds series square outlet box (Welded)

Representative product	TP451 Product Category: Other cable management products
Description of the product	Eaton's Crouse-Hinds series Square Cover (TP451) is a robust, welded steel square outlet box designed for electrical installations in commercial and institutional buildings. It belongs to the Crouse-Hinds series, known for its durability and reliability.
Homogeneous Environmental Families Covered	The PEP concerns following product offerings from Eaton Crouse-Hinds series square outlet box as mentioned below: TP403, TP403BH, TP403MSB, TP403SSB, TP432, TP432MSB, TP342VMS, TP436, TP436MSB, TP437, TP4H, TP4MPF, TP4MSB, TP4CS.
Functional unit	**"To connect a workstation remote from the wall to the energy and communication networks for 20 years, via following wiring accessories."**

AWG Size	**N0 18**	**NO 16**	**NO 14**	**NO 12**	**NO 10**	**NO 08**	**NO 06**
Maximum number of conductors	**20**	**17**	**15**	**13**	**12**	**10**	**6**

Company information	Eaton Meadowlands 2800 N Main Street, Washington, PA 15301 Email: productstewardship-es@eaton.com

Constituent Materials			
Reference product mass	4.54E-01 kg (With packaging)		
Category PEP Material	**Material constituent**	**Mass (kg)**	**% Contribution**
Metals	Galvanized Sheet Steel	4.35E-01	96.0%
Other	Cardboard	1.81E-02	4.00%
Total		4.54E-01	100.0%

Substance Assessment
The representative product is compliant with the EU-RoHS Directive (2011/65/EU) and the product doesn't contain any substance listed as Substance-of-Very-High-Concern (SVHC) on the Candidate List of the EU-REACH Regulation (1907/2006/EC).

Additional Environmental Information	
Manufacturing	The reference product is assembled at an Eaton Washington holding management system certifications according to ISO 14001 standards.
Distribution	Eaton is committed to minimizing weight and volume of product and packaging with focus to optimize transport efficiency.
Installation	The installation process does not require any energy consumption as the product is designed for manual installation.
Use	The product does not require maintenance or replacement during operation.
End of life	Default scenario of 100% incineration without energy recovery is considered for End-of-life treatment of product.

Environmental Impacts	
The calculation of the environmental impacts is the result of the Product's Life Cycle Analysis in accordance with ISO 14040/44, covering the entire lifecycle, i.e., "Cradle-to-Grave" including the following life cycle phases: production, distribution, installation, use and end of life. System modelling was carried out using the commercial LCA software EIME v6.3.2-4 with database version (CODDE-2025-04) Indicators Set: PEF EF 3.1 (Compliance: PEP ed.4, EN15804+A2) v2.0	
Manufacturing Phase	The product is assembled as well as packed at Eaton Meadowlands 2800 N Main Street Washington, PA 15301 Energy model used: US
Distribution Phase	Distribution of the product in its packaging from Eaton's last logistics platform to the installation place in US is considered as per PCR rules.
Installation Phase	Product is installed in US. Installation of product and treatment of packaging waste are considered in this phase. Energy model used: Europe
Use Phase	Reference lifetime: 20 Years For the considered scenario, the product has no energy consumption.
End of life Phase	Default scenario of 100% incineration without energy recovery is considered for End-of-life treatment of product. Energy model used: Europe

Environmental Impact Indicators: Mandatory

Mandatory environmental impact indicators	Units	Sum	A1-A3 - Manufacturing	A4 - Distribution	A5 - Installation	B6 - Operational energy use	C1-C4 - End of life
Climate change – total (GWP)	kg CO2 eq.	7.13E+00	6.77E+00	1.02E-01	3.44E-02	0.00E+00	2.23E-01
Climate change - fossil fuels (GWP-f)	kg CO2 eq.	7.12E+00	6.80E+00	1.02E-01	6.05E-03	0.00E+00	2.21E-01
Climate change – biogenics (GWP-b)	kg CO2 eq.	8.03E-03	-2.22E-02	4.17E-07	2.84E-02	0.00E+00	1.85E-03
Climate change - land use and land use transformation (GWP-lu)	kg CO2 eq.	4.20E-07	2.56E-07	1.54E-07	3.08E-10	0.00E+00	8.99E-09
Ozone depletion (ODP)	kg eq. CFC-11	2.77E-07	2.50E-07	1.24E-09	2.23E-10	0.00E+00	2.55E-08
Acidification (AP)	mole of H+ eq.	2.95E-02	2.77E-02	1.61E-04	3.57E-05	0.00E+00	1.61E-03
Freshwater eutrophication (EP-fw)	kg P eq.	1.17E-05	1.10E-05	3.81E-07	7.79E-09	0.00E+00	3.55E-07
Marine aquatic eutrophication (EP-m)	kg of N eq.	4.21E-03	3.78E-03	2.92E-05	8.61E-06	0.00E+00	3.92E-04
Terrestrial eutrophication (EP-t)	mole of N eq.	5.51E-02	4.95E-02	3.20E-04	1.15E-04	0.00E+00	5.19E-03
Photochemical ozone formation (POCP)	kg of NMVOC eq.	1.73E-02	1.60E-02	1.04E-04	2.42E-05	0.00E+00	1.13E-03
Depletion of abiotic resources – elements (ADPe)	kg eq. Sb	2.03E-04	2.03E-04	3.63E-08	9.32E-10	0.00E+00	3.04E-08
Depletion of abiotic resources - fossil fuels (ADP-f)	MJ	8.92E+01	8.32E+01	1.81E+00	1.13E-01	0.00E+00	4.10E+00
Water scarcity (WDP)	m3 of eq.. deprivation worldwide	7.31E+00	7.27E+00	3.67E-03	3.60E-04	0.00E+00	3.04E-02

Inventory Flow Indicators: Mandatory

Inventory flow indicators	Units	Sum	A1-A3 - Manufacturing	A4 - Distribution	A5 - Installation	B6 - Operational energy use	C1-C4 - End of life
Use of renewable primary energy, excluding renewable primary energy resources used as raw materials	MJ	6.97E+00	6.66E+00	5.70E-03	9.82E-03	0.00E+00	2.87E-01

Inventory flow indicators	Units	Sum	A1-A3 - Manufacturing	A4 - Distribution	A5 - Installation	B6 - Operational energy use	C1-C4 - End of life
Use of renewable primary energy resources used as raw materials	MJ	7.05E-01	7.05E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ	7.67E+00	7.37E+00	5.70E-03	9.82E-03	0.00E+00	2.87E-01
Use of non-renewable primary energy, excluding non-renewable primary energy resources used as raw materials	MJ	8.91E+01	8.31E+01	1.81E+00	1.13E-01	0.00E+00	4.10E+00
Use of non-renewable primary energy resources used as raw materials	MJ	1.08E-01	1.08E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Total use of non-renewable primary energy resources (primary energy and primary energy resources used as raw materials)	MJ	8.92E+01	8.32E+01	1.81E+00	1.13E-01	0.00E+00	4.10E+00
Use of secondary materials	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Use of non-renewable secondary fuels	MJ	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Net use of fresh water	m3	1.70E-01	1.69E-01	8.54E-05	8.23E-06	0.00E+00	7.05E-04
Hazardous waste disposed of	kg	1.90E+00	1.08E+00	4.26E-04	6.71E-03	0.00E+00	8.18E-01
Non-hazardous waste disposed of	kg	7.05E+00	7.01E+00	9.46E-03	8.19E-04	0.00E+00	3.15E-02
Radioactive waste disposed of	kg	3.63E-03	3.61E-03	7.49E-06	3.45E-07	0.00E+00	1.53E-05
Components for re-use	kg	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Materials for recycling	kg	5.95E-07	5.95E-07	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
Exported energy	MJ by energy vector	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon content of the product	kg of C.	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Biogenic carbon content of the associated packaging	kg of C.	1.61E-02	1.61E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Environmental Impact Indicators: Optional

Optional Environmental impact indicators	Units	Sum	A1-A3 - Manufacturing	A4 - Distribution	A5 - Installation	B6 - Operational energy use	C1-C4 - End of life
Emission of fine particles	incidence of diseases	4.03E-07	3.91E-07	1.38E-09	2.47E-10	0.00E+00	1.07E-08
Ionizing radiation, human health	kBq of U235 eq.	6.34E-01	5.49E-01	3.61E-03	2.27E-03	0.00E+00	7.85E-02
Ecotoxicity, fresh water	CTUe	2.71E+01	1.65E+01	2.97E+00	1.57E-01	0.00E+00	7.43E+00
Human toxicity, cancer effects	CTUh	7.13E-09	7.03E-09	2.00E-11	1.14E-12	0.00E+00	7.88E-11
Human toxicity, non-cancer effects	CTUh	8.25E-08	7.86E-08	3.81E-10	4.54E-11	0.00E+00	3.50E-09
Impacts related to land use/soil quality	-	1.90E-02	1.02E-02	4.36E-04	1.33E-04	0.00E+00	8.23E-03
Total use of primary energy during the life cycle	MJ	9.69E+01	9.05E+01	1.82E+00	1.23E-01	0.00E+00	4.38E+00

To evaluate the environmental impact of other product covered by this PEP, multiply the impact figures by-

Factors for Manufacturing, Distribution, Installation, Use and End-of-Life Phase:

Catalog Number	Manufacturing	Distribution	Installation	Use	End-of-life
TP451(Reference)	1.00	1.00	1.00	-	1.00
TP403	0.88	0.88	1.00	-	0.88
TP403BH	0.88	0.88	1.00	-	0.88
TP403MSB	0.99	0.99	1.00	-	0.99
TP403SSB	0.99	0.99	1.00	-	0.99
TP432	0.88	0.88	1.00	-	0.88
TP432MSB	0.99	0.99	1.00	-	0.99
TP432VMS	1.03	1.03	1.00	-	1.03
TP436	0.88	0.88	1.00	-	0.88
TP436MSB	0.99	0.99	1.00	-	0.99
TP437	1.02	1.02	1.00	-	1.02

Catalog Number	Manufacturing	Distribution	Installation	Use	End-of-life
TP4H	0.96	0.96	1.00	-	0.96
TP4MPF	1.00	1.00	1.00	-	1.00
TP4MSB	1.02	1.02	1.00	-	1.02
TP4CS	0.92	0.92	1.00	-	0.92

Disclaimer

This Product Environmental Profile and its content is based on information available to us. It refers to the product at the date of issue. We make no express or implied representations or warranties with respect to the information contained herein.

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Date of issue	11-2025	*Information and reference documents*	www.pep-ecopassport.org
		Validity period	5 years
Independent verification of the declaration and data, in compliance with ISO 14025: 2006			
Internal	X	External	
The PCR review was conducted by a panel of experts chaired by Julie Orgelet (DDemain)			
PEPs are compliant with XP C08-100-1:2016 and EN 50693:2019 *The components of the present PEP may not be compared with components from any other program.*			
Document complies with ISO 14025: 2006 « Environmental labels and declarations. Type III environmental declarations »			