



Cable Tie 22HD

Product
Environmental Profile



Unex Environmental Commitments

Since 1964, Unex is committed to create conditions which offer maximum safety to facilities and users, providing a better quality of life for people.

- **Development of activities under a sustainable use of natural resources, an efficient utilization of energy and the respect for the environment, for customers and for the Unex team.** Unex has implemented an environmental management system according to ISO 14001:2015, certified by AENOR.
- **Use of sustainable materials.** By formulating own raw materials the most sustainable ingredients are chosen. Unex is committed to comply with the RoHS Directive and not to use substances of very high concern according to the REACH regulation.
- **Sustainable and circular products to offer the customers.** Developing innovative solutions respectful with the environment, durables and recyclables, contributing to a sustainable future for all.

Reference product

Representative product	Unex Cable tie 22HD – 2247HD (4.8x287 mm)
Description of the product	<p>The main function of this cable tie is to manage and secure wiring systems in electrical installations, in indoor, outdoor and in chemical environments.</p> <p>Its insulating locking mechanism ensures easy tightening and high mechanical resistance. Its inside flush teeth avoid damage on the cable jacket.</p> <p>The functional unit is one cable tie.</p>

UNEX cable ties 22 HD comply with EN 62275:2015 Standard and their quality is recognized by the most stringent quality marks and approvals.

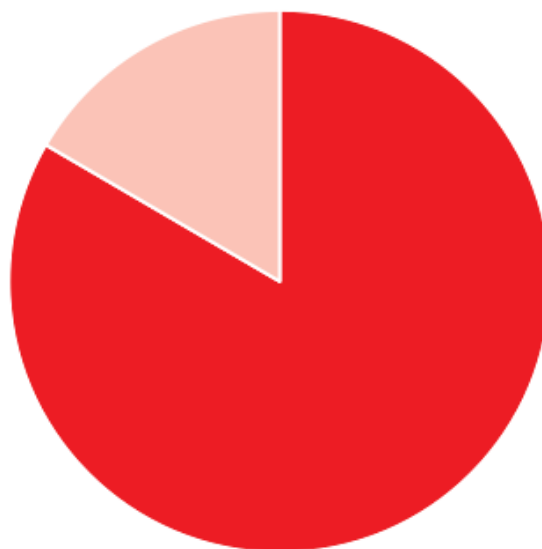
Homogeneous environmental families

Environmental impacts within the product's family (cat.no. 2221HD, 2233HD, 2244HD, 2272HD, 2273HD) are considered to be proportional to the mass of the reference product.

Constituent materials

Total weight of cable tie 2247HD including packaging		2.04 g			
Product (% of total mass)					
Plastics in % of the total mass		Metals (% of total mass)		Other (% of the total mass)	
PA	83.4%				
Packaging (% of total mass)					
Plastics in % of the total mass		Metals (% of total mass)		Other (% of the total mass)	
PE	7.1%			Cardboard, paper & wood	9.5%

CONSTITUENT MATERIALS
CABLE TIE 2247HD



■ PA ■ Packaging

Additional environmental information

Manufacturing

Unex is committed to increase sustainability of processes through waste management, use of water and using more sustainable materials to contribute to Circular Economy. For this reason, Unex has incorporated recycled materials in the packaging so the estimated recycled content of this reference product is 11'62% by mass.

Unex is also committed not to throw away production waste. Through a recycling cycle it is reused as much as possible in our process.

Distribution

Unex Products are manufactured in Europe, distributed from their factories to the Warehouse and then distributed to several countries in Europe and all around the World.

The warehouse is located in a strategic area with the aim to reduce displacements to markets. The reliability of deliveries and the immediate availability of the products are ensured by a complete stock in Unex logistic centre and by a world-wide distribution network.

The packaging is optimized and contains recycled material in order to contribute to the circular economy.

Installation

A tool is not required as Unex cable ties are easy to thread, allowing quick and effortless assembly. The installation of cable ties does not require energy, as it is done manually.

Use stage

This product does not require maintenance or additional products to fulfil its function under normal conditions.

Highlight that Unex products are designed to enlarge their lifetime, so contributing to reduce their environmental impact and to improve their sustainability.

End of life

Products manufactured by UNEX group use 100% recyclable raw material in order to reduce waste generation. However, to calculate the real recyclability of the product calculations are based on real end-of-life practices, not only on product's attributes.

So the estimated **recyclability rate** reaches **88%**, based on IEC/TR 62635 and considering an average of 78% of plastic material (excluding packaging) and 10% of packaging (of all types of materials).

The packaging's end-of-life is considered during the design phase. Therefore, packaging is made with a high percent of recycled material to contribute to the Circular Economy.

Environmental impacts

The evaluation of environmental impacts examines each stage of the life cycle (manufacturing, distribution, installation, use and end of life).

For each phase, the following aspects have been considered:

Reference Service Life (RSL)	20 years (*)
Manufacturing	From extraction of materials to product and packaging manufacturing, waste generated during the process and its delivery to the logistic platform are considered.
Distribution	Transport between factories, Unex logistic centre and an average delivery point related to all our sales area is considered.
Installation	The end of life of the packaging is considered.
Use stage	The use neither generates emission nor requires any energy consumption during the use phase.
End of life	Removal, dismantling, transportation of the end-of-life product to a treatment centre and its treatment are considered.
Software and database used	EIME V5.9.1 and database version CODDE 2020-11

(*) This RSL is the theoretical period used defined in the PCR, but this duration does not constitute a minimum durability requirement.

Environmental Indicators

The following table details the values declared on the life cycle of the product corresponding to the functional unit:

	Total Life Cycle		Manufacturing		Distribution		Installation		Use		End of Life	
				%		%		%		%		%
Global Warming Potential (GWP)	1.89e-2	kg CO2 eq	1.78e-2	94	4.57e-4	2.42	2.18e-4	1.15	0.00	0	4.64e-4	2.45
Total Primary Energy	8.84e-1	MJ	8.73e-1	98.75	5.68e-3	0.64	9.37e-4	0.11	0.00	0	4.62e-3	0.52
Acidification of soil & water (A)	3.97e-5	kg SO2 eq	3.02e-5	76	8.33e-6	21	2.10e-7	0.53	0.00	0	9.90e-7	2.49
Depletion of abiotic resources-elements (ADPe)	1.51e-9	kg antimony eq.	1.53e-9	98.7	8.34e-12	0.55	-2.68e-11	-1.78	0.00	0	3.64e-13	0.024
Depletion of abiotic resources-fossils fuels (ADPf)	3.60e-1	MJ	3.49e-1	96.9	5.65e-3	1.57	9.28e-4	0.26	0.00	0	4.59e-3	1.28
Air pollution (AP)	2.38e+0	m3	2.32e+0	97.3	4.43e-2	1.86	3.66e-3	0.15	0.00	0	1.55e-2	0.65
Water Pollution (WP)	2.49e+0	m3	2.35e+0	94.6	6.70e-2	2.69	1.11e-2	0.45	0.00	0	5.50e-2	2.21
Net use of freshwater	8.49e-4	m3	8.48e-4	99.88	2.85e-7	0.033	3.29e-7	0.039	0.00	0	4.58e-7	0.054
Water Eutrophication (WE)	1.14e-5	kg PO4 ³ eq	9.73e-6	85.5	8.92e-7	7.84	1.72e-7	1.51	0.00	0	5.86e-7	5.15
Ozone depletion (ODP)	7.86e-10	kg CFC-11eq	3.12e-10	39.7	1.58e-10	20.1	5.24e-11	6.67	0.00	0	2.63e-10	33.50
Photochemical Ozone Formation (POCP)	2.91e-5	kg C2H4 eq	2.87e-5	98.4	3.93e-7	1.35	1.39e-8	0.048	0.00	0	4.66e-8	0.16

The manufacturing phase is the life cycle phase which has the greatest impact on most of environmental indicators.

The environmental impact of the system covered by this PEP Ecopassport® can be calculated by multiplying the values of the environmental indicators by the corresponding factor indicated in the table below.

REFERENCE	WIDTH (mm)	LENGTH (mm)	COEFFICIENT
2221HD	2.5	101	0.14
2233HD	3.6	142	0.55
2244HD	4.8	188	0.67
2247HD	4.8	287	1.00
2272HD	7.6	299	2.47
2273HD	7.6	376	3.01

Check list box

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Date of issue: 12-2021

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Independent verification of the declaration and data, in compliance with ISO 14025:2010

Internal:

External:

The PCR review was conducted by a panel of experts chaired by Philippe Osset (SOLINNEN)

PEP are compliant with XP C08-100-1:2014

Document in compliance with ISO 14025:2010 "Environmental labels and declarations. Type III environmental declarations"



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