BUILDING PRODUCT DECLARATION BPD 3

in compliance with the guidelines of the Ecocycle Council, June 2007

1 Basic data

Product identification			Document ID BPD_2.0_HVU-TZ
Product name Hilti HVU-TZ Kemiskt ankare	Product no/ID designation All Sizes		Product group 01799/ZSE
☐ New declaration ☒ Revised declaration	**In the case of a revised declaration**		
	Has the product been changed?		The change relates to
	☒ No	☐ Yes	Changed product can be identified by
Drawn up/revised on (date) 12.02.2015			Inspected without revision on (date)
Other information:			

2 Supplier information

Company name Hilti Svenska AB			Company reg. no/DUNS no 556064-7348	
Address Box 123 232 22 Arlöv, Sweden			Contact person Telephone 040 539300	
Website: www.hilti.se			E-mail info@se.hilti.com	
Does the company have an environmental management system?			☒ Yes	☐ No
The company possesses certification in compliance with	☒ ISO 9000	☒ ISO 14000	☐ Other	If "other", please specify:
Other information:				

3 Product information

Country of final manufacture Germany				If country cannot be stated, please state why	
Area of use Heavy duty fastenings in cracked concrete and for dynamic loading					
Is there a Safety Data Sheet for this product?				☐ Not relevant	☒ Yes ☐ No
In accordance with the regulations of the Swedish Chemicals Agency, please state:				Classification Xi, R 36, R43 Labelling Xi; R36,R43 S3, S26 contains: methacrylic acid, monoester with propane-1,2-diol dibenzoyl peroxide	☐ Not relevant
Is the product registered in BASTA?					☐ Yes ☒ No
Has the product been eco-labelled?	☐ Criteria not found	☐ Yes	☒ No	If "yes", please specify:	
Is there a Type III environmental declaration for the product?					☐ Yes ☐ No
Other information:					

4 Contents (To add a new green row, select and copy an entire empty row and paste it in)

At the time of delivery, the product comprises the following parts/components, with the chemical composition stated:					
Constituent materials/ components	**Constituent substances**	**Weight % or g**	**EG no/ CAS no (or alloy)**	**Classifi-cation**	**Comments**
Methacrylateresin mixture		2,5-10		Xi; R 36-	confidential

Data in fields highlighted in green are requriements in compliance with the Ecocycle Council guidelines.

				43	
Dibenzoylperoxide		1-2	94-36-0	E; R3 R7 Xi; R36 R43	
Dicyclohexylphthalate		1-2	84-61-7	Xi, R36/37/ 38	
Quartz (SiO2) or Corundum (Al2O3)		60-75	14808-60-7 or 1344-28-1		
Polyethylene-composite foil		4-5	Not available		
Other information:					

If the chemical composition of the product after it is built in differs from that at the time of delivery, the content of the **finished built in product** should be given here. If the content is unchanged, no data need be given in the following table.

Constituent materials/ components	**Constituent substances**	**Weight % or g**	**EG no/ CAS no (or alloy)**	**Classifi-cation**	**Comments**
Cured chemical anchor	Quartz or Corundum	60-75%			
	Polyethylen-composite foil	4-5%			
	Dicyclohexyl-phthalate	1-2%			
	Cured Poly-methacrylate resin	16-32%			
Other information:					

5 Production phase

Resource utilisation and environmental impact during production of the item is reported in one of the following ways:

☐ 1) Inflows (goods, intermediate goods, energy etc) for the registered product into the **manufacturing unit**, and the outflows (emissions and residual products) from it, i.e. from "gate-to-gate".

☒ 2) All inflows and outflows from the extraction of raw materials to finished products i.e. "cradle-to-gate".

☐ 3) Other limitation. State what:

The report relates to unit of product 1 kg	☒ Reported product	☐ The product's product group	☐ The product's production unit

Indicate **raw materials and intermediate goods** used in the manufacture of the product		☐ Not relevant
Raw material/intermediate goods	Quantity and unit	Comments
Aluminium	2	
Polymer	32	
Paper	120	
Chemical Components	846	

Indicate **recycled materials** used in the manufacture of the product		☒ Not relevant
Type of material	Quantity and unit	Comments

Enter the **energy** used in the manufacture of the product or its component parts		☐ Not relevant
Type of energy	Quantity and unit	Comments
Energy (heat of combustion)	50,69 MJ	Raw materials

Energy reg. (heat of combustion)	1,92 MJ	Raw materials
Energy (heat of combustion)	3,78 MJ	Product manufacturing
Energy reg. (heat of combustion)	0,11 MJ	Product manufacturing
Enter the **transportation** used in the manufacture of the product or its component parts		☐ Not relevant
Type of transportation	Proportion %	Comments
Sea	78	16800 km; 0,3 kg
Truck	22	4716 km; 0,7 kg
Enter the **emissions to air, water or soil** from the manufacture of the product or its component parts		☐ Not relevant
Type of emission	Quantity and unit	Comments
Air pollution	0,01 kg	Raw materials
Water pollution	$4{,}90 \cdot 10^{-3}$ kg	Raw materials
Air pollution	$1{,}89 \cdot 10^{-4}$ kg	Product manufacturing
Water pollution	$1{,}30 \cdot 10^{-4}$ kg	Product manufacturing

Enter the **residual products** from the manufacture of the product or its component parts — ☐ Not relevant

Residual product	Waste code	Quantity	Proportion recycled: Material recycled %	Proportion recycled: Energy recycled %	Comments
Disposed waste		0,13 kg			Raw materials
Dangereous waste		0,01 kg			Raw materials
Inert waste		0,10 kg			Raw materials
Radioactive waste		$9{,}84 \cdot 10^{-5}$ kg			Raw materials
Nonhazardous waste		$2{,}05 \cdot 10^{-3}$ kg			Raw materials
Disposed waste		0,73 kg			Product manufacturing
Dangereous waste		$2{,}5 \cdot 10^{-3}$ kg			Product manufacturing
Inert waste		0,73 kg			Product manufacturing
Radioactive waste		$2{,}96 \cdot 10^{-4}$ kg			Product manufacturing
Nonhazardous waste		$1{,}07 \cdot 10^{-7}$ kg			Product manufacturing

Is there a description of the data accuracy for the manufacturing data?	☒ Yes	☐ No	If "yes", please specify: Life Cycle Assessment Report - HILTI HVU-TZ
Other information:			

6 Distribution of finished product

Does the supplier put into practice a system for returning load carriers for the product?	☒ Not relevant	☐ Yes	☐ No
Does the supplier put into practice any systems involving multi-use packaging for the product?	☒ Not relevant	☐ Yes	☐ No
Does the supplier take back packaging for the product?	☒ Not relevant	☐ Yes	☐ No
Is the supplier affiliated to REPA?	☐ Not relevant	☒ Yes	☐ No
Other information:			

7 Construction phase

Are there any special requirements for the product during storage?	☐ Not relevant	☒ Yes	☐ No	If "yes", please specify: cool, dry, dark between 5°C - 25°C
Are there any special requirements for adjacent building products because of this product?	☐ Not relevant	☒ Yes	☐ No	If "yes", please specify: base material temp. -5°C - +40°C during installation
Other information:				

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8 Usage phase

Does the product involve any special requirements for intermediate goods regarding operation and maintenance?			☐ Yes	☒ No	If "yes", please specify:	
Does the product have any special energy supply requirements for operation?			☐ Yes	☒ No	If "yes", please specify:	
Estimated technical service life for the product is to be entered according to one of the following options, a) or b):						
a) Reference service life estimated as being approx.	☐ 5 years	☐ 10 years	☐ 15 years	☐ 25 years	☒ >50 years	Comments
b) Reference service life estimated to be in the interval of years						
Other information:						

9 Demolition

Is the product ready for disassembly (taking apart)?	☐ Not relevant	☐ Yes	☒ No	If "yes", please specify:
Does the product require any special measures to protect health and environment during demolition/disassembly?	☐ Not relevant	☒ Yes	☐ No	If "yes", please specify: Use dust protection during demolition of cured chemical anchor
Other information: Cured chemical anchor behaves like concrete base material in terms of dust formation during demolition				

10 Waste management

Is it possible to re-use all or parts of the product?	☐ Not relevant	☐ Yes	☒ No	If "yes", please specify:
Is it possible to recycle materials for all or parts of the product?	☐ Not relevant	☒ Yes	☐ No	If "yes", please specify: Outer packaging (cardboard) and IFU (paper) can be recycled
Is it possible to recycle energy for all or parts of the product?	☐ Not relevant	☐ Yes	☒ No	If "yes", please specify:
Does the supplier have any restrictions and recommendations for re-use, materials or energy recycling or waste disposal?	☐ Not relevant	☐ Yes	☒ No	If "yes", please specify:
Enter the waste code for the **supplied** product 08 04 10				
Is the **supplied** product classed as hazardous waste?			☐ Yes	☒ No
If the chemical composition of the product differs after having been built in from that which it had at the time of delivery, meaning that another waste code is given to the finished **built in** product, then this should be entered here. If it is unchanged, the following details can be omitted.				
Enter the waste code for the **built in** product 17 01 01				
Is the **built in** product classed as hazardous waste?			☐ Yes	☒ No
Other information: No packaging waste of product remains after installation. Foil remains in borehole due to unique foil capsule design.				

11 Indoor environment (To add a new green row, select and copy an entire empty row and paste it in)

When used as intended, the product gives off the following emissions:		☐ The product does not have any emissions	
Type of emission	**Quantity [µg/m²h] or [mg/m³h]**	**Method of measurement**	**Comments**
	4 weeks / **26 weeks**		
TVOC	< 0,0055	Chamber method	Method complies

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	mg/m3			to AgBB/DIBt protocol; no 26 weeks measurement required
VVOC	< 0,005 mg/m3		Chamber method	see TVOC
SVOC	< 0,005 mg/m3		Chamber method	see TVOC
Carcinogens	< 0,001 mg/m3		Chamber method	see TVOC
Formaledehyde	< 0,003 mg/m3		Chamber method	see TVOC
Acetaldehyde	< 0,003 mg/m3		Chamber method	see TVOC
C_3-C_6 Aldehydes	< 0,003 mg/m3		Chamber method	see TVOC

Can the product itself give rise to any noise?		☒ Not relevant	☐ Yes	☐ No
Value	Unit	Method of measurement		
Can the product give rise to electrical fields?		☒ Not relevant	☐ Yes	☐ No
Value	Unit	Method of measurement		
Can the product give rise to magnetic fields?		☒ Not relevant	☐ Yes	☐ No
Value	Unit	Method of measurement		
Other information:				

References

Appendices