# BUILDING PRODUCT DECLARATION BPD 3

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

## 1 Basic data

| **Product identification** | | | Document ID 2016_HIT-MM PLUS |
|---|---|---|---|
| Product name<br>Hilti HIT-MM PLUS Injekteringsmassa | Product no/ID designation<br>All sizes | | Product group<br>ZSE/01799 |
| ☒ New declaration<br>☐ 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) 2016-06-01 | | | 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<br>232 22 Arlöv, Sweden | | | Contact person<br>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 Wide range of fastening applications in the medium load range in hollow block, solid block and concrete where no approval is required | | | | |
| 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, O R36/38, R43; R7<br>Labelling Xi, O<br>R36/38, R43; R7;<br>S3, S24/25, S26, S28, S36/37/39,<br>contains: dibenzoyl peroxide, methacrylic acid, monoester with propane-1,2-diol | | ☐ 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/** | **Constituent** | **Weight** | **EG no/ CAS no** | **Classifi-** | **Comments** |

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

| components | substances | % or g | (or alloy) | cation | |
|---|---|---|---|---|---|
| A-component | Quartz | 25-50% | 14808-60-7 | | |
| | Alumina Cement | 10-25% | 65997-16-2, 1344-28-1 | | |
| | Methacrylate resin mixture | 25-50% | | Xi; R36, R43, R52/53 | |
| | Silica | 2,5-5% | 67762-90-7 | | |
| | Pigment | < 0,1% | | | |
| B-component | Quartz | 50–75% | 14808-60-7 | | |
| | Silica | 2,5-5% | 7631-86-9 | | |
| | Water | 25-50% | 7732-18-5 | | |
| | Benzoyl peroxide | 5–10% | 94-36-0 | E; R3 R7 Xi; R36 R43 | |

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 | 25-50% | | | |
| | Hydrated Cement | 10-25% | | | |
| | Silica | 2,5-5% | | | |
| | Cured Poly-methacrylate resin | 30-40% | | | |
| | Pigment | < 0,1% | | | |
| | | | | | |

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: cradle-to-grave

| The report relates to unit of product 1kg | ☒ 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 |
| Aluminum | 3g | |
| Polymer | 90 g | |
| Paper | 30 g | |

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| | | |
|---|---|---|
| Chemical components | 877 g | |
| 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) | 38 MJ | Raw materials |
| Energy reg. (heat of combustion) | 2,1 MJ | Raw materials |
| Energy (heat of combustion) | 1,6 MJ | Product manufacturing |
| Energy reg. (heat of combustion) | 0,1 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 | 16800km; 0,3kg |
| Truck | 22 | 4716km; 0,7kg |
| 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 |
| Global warming potential (GWP 100years) | 2,4 kg $CO_2$-Equiv. | Raw materials |
| Acidification potential (AP) | $9{,}1 \cdot 10^{-3}$ kg $SO_2$ Equiv. | Raw materials |
| Ozone depletion potential (ODP, catalytic) | $3{,}1 \cdot 10^{-7}$ kg R11 Equiv. | Raw materials |
| Photochemical Ozone creation pot. (POCP) | $9{,}7 \cdot 10^{-4}$ kg Ethen-Equiv. | Raw materials |
| Global warming potential (GWP 100years) | $1{,}2 \cdot 10^{-1}$ kg $CO_2$-Equiv. | Product manufacturing |
| Acidification potential (AP) | $5{,}6 \cdot 10^{-4}$ kg $SO_2$ Equiv. | Product manufacturing |
| Ozone depletion potential (ODP, catalytic) | $1{,}7 \cdot 10^{-8}$ kg $R_{11}$ Equiv. | Product manufacturing |
| Photochemical Ozone creation pot. (POCP) | $3{,}0 \cdot 10^{-5}$ kg Ethen-Equiv. | Product manufacturing |

| Enter the **residual products** from the manufacture of the product or its component parts | | | | | ☐ Not relevant |
|---|---|---|---|---|---|
| | | | Proportion recycled | | |
| Residual product | Waste code | Quantity | Material recycled % | Energy recycled % | Comments |
| Dangereous waste | | $2{,}30 \cdot 10^{-2}$ kg | | | Raw materials |
| Inert waste | | 2,10 kg | | | Raw materials |
| Radioactive waste | | $1{,}2 \cdot 10^{-3}$ kg | | | Raw materials |
| Nonhazardous waste | | $2{,}10 \cdot 10^{-2}$ kg | | | Raw materials |
| Dangereous waste | | $2{,}30 \cdot 10^{-3}$ kg | | | Product manufacturing |
| Inert waste | | $2{,}7 \cdot 10^{-1}$ kg | | | Product manufacturing |
| Radioactive waste | | $2{,}10 \cdot 10^{-4}$ kg | | | Product manufacturing |
| Nonhazardous waste | | $1{,}00 \cdot 10^{-7}$ kg | | | Product manufacturing |
| Is there a description of the data accuracy for the manufacturing data? | ☒ Yes | ☐ No | If "yes", please specify: Details see "Life Cycle Assessment report Hilti HIT-MM PLUS" | | |
| Other information: | | | | | |

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

## 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: Hilti HIT uses a unique dispenser with refill system (cassette & foil pack) to minimize packaging waste. | | | |

## 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:<br>during installation:<br>base material temp. 0°C- +40°C,<br>product temp. +5°C - +40°C |
| Other information: | | | | |

## 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 or brick 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 foil (PE) and IFU (paper) can be recycled |
| Is it possible to recycle energy for all or parts | ☐ Not relevant | ☒ Yes | ☐ No | If "yes", please specify: |

| | | | | |
|---|---|---|---|---|
| of the product? | | | | Packaging waste (used mixer, empty foilpack & connector) suitable for thermal recycling |
| 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 09 | | |
| 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: Empty packs may be disposed via local Green Dot collecting system | | |

## 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 | < 0,005 mg/m3 | | Chamber method | Method complies 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 |
| Formaldehyde | < 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: HILTI HFX complies with the requirements of DIBt (October 2008) and AgBB (May 2010) for use in the indoor environment | | | | |

## References

## Appendices