

Product Circularity Data Sheet

**ZINQ GmbH &
Co. KG**

microZINQ®

ZINQ

PCDS N°: 0100200290000011

GTIN: N/A CAS: N/A Internal ID: N/A

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DE

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CREATION DATE : 2025/07/07

EXPIRATION DATE : 2030/07/07

Standard - 010020029
In accordance with ISO 59040

Key figures

MATERIAL INPUTS 	DISCLOSED SUBSTANCES	99-100%
	NO HAZARDOUS SUBSTANCES	TRUE
	REUSED MATERIALS	0%
	RECYCLED MATERIALS	10-25%
	RENEWABLE MATERIALS	0%
PRODUCTION 	RENEWABLE ENERGY	10-25%
	RECIRCULATED WATER	0%
LIFETIME 	REPAIRABLE	TRUE
	DEMOUNTABLE	99-100%
	DISASSEMBLABLE	99-100%
	REUSABLE	TRUE
	REFURBISHABLE	TRUE
END OF LIFE 	RELEASED IN ENVIRONMENT	0-10%
	DISMANTABLE	99-100%
	REMANUFACTURABLE	TRUE
	RECYCLABLE	99-100%
	COMPOSTABLE	FALSE
BENEFITS 	IMPROVE AIR	TRUE
	IMPROVE WATER	FALSE
	STORE ENERGY	FALSE

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PCDS Template issuer

Organization name : Terra Matters

1.1.0.01*

Organization street address : 439 ZAE Wolser F

1.1.0.02*

Organization city address : Bettembourg

1.1.0.03*

Organization postal code : L-3290

1.1.0.04*

Organization country : Luxembourg

1.1.0.05*

PCDS Template identifier

PCDS template identifier : 010020029

1.2.0.01*

PCDS Template version

PCDS template version number : 2

1.3.0.01*

Description of key changes : PCDS (Product Circularity Data Sheet) Version 2

1.3.1.01

Persistent identifier page

Persistent identifier page :

https://github.com/Ungoro1/TerraMatters_Templates/tree/14b58d1bf21c9a592a84252ae08b4583e0c9120c/registries/010/02/001

1.4.1.01

Guidance <https://doi.org/10.5281/zenodo.15229345>

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2. Company and product information

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Product identification

Product name provided on the label where the product is sold : microZINQ®

2.1.0.01*

Brand name provided on the label where the product is sold : ZINQ

2.1.0.02*

CAS Registry Number : N/A

2.1.1.01

Internal product ID code used by the manufacturer : N/A

2.1.1.02

Internationally recognized product ID : N/A

2.1.1.03

Supplier identification

Supplier name provided on the label where the product is sold : ZINQ GmbH & Co. KG

2.2.0.01*

Supplier street address : Nordring 4

2.2.0.02*

Supplier city address : Gelsenkirchen

2.2.0.03*

Supplier postal code : 45894

2.2.0.04*

Supplier country : DE

2.2.0.05*

Country-specific corporate identification number : DE215715734

2.2.1.01

Global Location Number (GLN) : N/A

2.2.1.02

Production site information

Production Site Name : N/A

2.3.1.01*

Production site street address : N/A

2.3.1.02*

Production site city address : N/A

2.3.1.03*

Production site postal code : N/A

2.3.1.04*

Production site country : Germany

2.3.1.05*

Production site code type in accordance with any internationally recognized system : N/A

2.3.1.06*

Production site identification number : N/A

2.3.1.07*

PCDS issuance

PCDS unique identifier : 0100200290000011

2.4.0.01*

PCDS version number : 1

2.4.0.02*

Date of initial PCDS issuance : 2025/07/07

2.4.0.03*

Functional title or department name providing or gathering the information for all PCDS sections : Sustainability Management

2.4.0.04*

Business email of the competent department providing or gathering the information for all PCDS sections :

anna.geigenmueller@zinq.com

2.4.1.01

Business phone of the competent department providing or gathering the information for all PCDS sections :

+492099403400

2.4.1.02

*mandatory

PCDS revision

Date of revision of PCDS : N/A
2.5.0.01*

Functional title or department name revising the information for all PCDS sections : Sustainability Management
2.5.0.02*

Business email of the competent department revising the information for all PCDS sections : N/A
2.5.1.01

Business phone of the competent department revising the information for all PCDS sections : N/A
2.5.1.02

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3.1.0.00 Product composition

3.1.0.02*	Threshold at which the product composition is disclosed is 100 ppm.	TRUE	3.1.1.01	Third party validation of the product composition.	TRUE
3.1.0.12*	Mass fraction of all disclosed chemical substances in the product at the specified threshold is 99 % < X ≤ 100 %.	TRUE	3.1.1.02	Independent certification award regarding the product composition.	TRUE
3.1.0.13*	The product composition declaration is available publicly (relates to UID 3.1.0.05-12).	FALSE			

3.2.0.00 Hazardous substances and substances of concern

3.2.0.01*	This product contains no known hazardous substances according to the relevant cited reference standards or regulations.	TRUE	3.2.0.02*	A declaration of hazardous substances in the product according to the selected cited reference standards or regulations, is available publicly.	TRUE
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3.3.0.00 Reused content

3.3.0.01*	The product contains reused parts.	FALSE	3.3.0.10*	The data are available publicly (relates to UID 3.3.0.02-09).	FALSE
3.3.0.02*	Mass fraction of reused parts out of the total product mass is X = 0 %.	TRUE			

*mandatory

1 2 **3. Material Inputs** 4 5 6 7

3.4.0.00 Recycled materials

3.4.0.03*	Mass fraction of recycled materials out of the total product mass is $10\% < X \leq 25\%$.	TRUE	3.4.0.28*	The pre-consumer and post-consumer recycled content is attributed recycled content, excluding book and claim model.	TRUE
3.4.0.09*	The data are available publicly (relates to UID 3.4.0.01-08).	TRUE	3.4.1.01	Availability of pre-consumer recycled content composition at the threshold limit of 0,1 % of recycled content mass.	TRUE
3.4.0.12*	Mass fraction of pre-consumer recycled materials out of the total product mass is $10\% < X \leq 25\%$.	TRUE	3.4.1.02	The data are available publicly (relates to UID 3.4.1.01).	FALSE
3.4.0.18*	The data are available publicly (relates to UID 3.4.0.10-17).	FALSE	3.4.1.03	Availability of post-consumer recycled content composition at the threshold limit of 0,1 % of recycled content mass.	TRUE
3.4.0.20*	Mass fraction of post-consumer recycled materials out of the total product mass is $0\% < X \leq 10\%$.	TRUE	3.4.1.04	The data are available publicly (relates to UID 3.4.1.03).	FALSE
3.4.0.27*	The data are available publicly (relates to UID 3.4.0.19-26).	FALSE			

3.5.0.00 Renewable materials

3.5.0.01*	Mass fraction of renewable materials out of the total product mass is $X = 0\%$.	TRUE	3.5.1.01	Availability of renewable content composition at the threshold limit of 0,1 % of renewable content mass.	FALSE
3.5.0.09*	The data are available publicly (relates to UID 3.5.0.01-08).	FALSE	3.5.1.02	The data are available publicly (relates to UID 3.5.1.01).	FALSE
3.5.0.10*	The renewable content is attributed content, excluding book and claim model.	FALSE			

*mandatory

4.1.1.00 Renewable energy

4.1.1.03	Fraction of energy that is renewable used in the production is $10 \% < X \leq 25 \%$.	TRUE	4.1.1.11	Purchase of renewable energy from the local utility grid.	TRUE
4.1.1.09	The data are available publicly (relates to UID 4.1.1.01-08).	FALSE	4.1.1.12	Purchase of renewable energy in the form of renewable energy credits (RECs).	FALSE
4.1.1.10	Generation of renewable energy by (or at) the facility that produces the product.	FALSE			

4.2.1.00 Water reuse or recirculation

4.2.1.01	Volume fraction of reused or recirculated water used in the production of the product is $X = 0 \%$.	TRUE	4.2.1.10	Volume fraction of reduction of direct water consumption used in the production of the product is $X = 0 \%$.	TRUE
4.2.1.09	The data are available publicly (relates to UID 4.2.1.01-08).	FALSE	4.2.1.18	The data are available publicly (relates to UID 4.2.1.10-17).	FALSE

*mandatory

1 2 3 4 5.Durability and extended lifetime 6 7

5.1.1.00 Reliability

5.1.1.01 Product meeting relevant industrial state of the art reliability levels. TRUE

5.2.1.00 Maintenance and repair

5.2.1.01 The product has the ability to be repaired. TRUE

5.2.1.08 Availability of spare parts for the repair of the product. TRUE

5.2.1.02 The product can be repaired by the user of the product. TRUE

5.2.1.09 The data are available publicly (relates to UID 5.2.1.08). TRUE

5.2.1.03 The product can be repaired by a generalist. TRUE

5.2.1.10 Repair services are offered by the manufacturer or producer. TRUE

5.2.1.04 The product can be repaired by an expert. TRUE

5.2.1.11 The product can be repaired in the same environment where it is used. TRUE

5.2.1.05 The product can be repaired by a manufacturer expert. TRUE

5.2.1.12 The product can be repaired in a workshop environment. TRUE

5.2.1.06 The product can be repaired by an authorized expert. TRUE

5.2.1.13 The product can be repaired in a production-equivalent environment. TRUE

5.2.1.07 The data are available publicly (relates to UID 5.2.1.01-06). TRUE

5.2.1.14 The data are available publicly (relates to UID 5.2.1.11-13). TRUE

5.3.1.00 Upgradability

5.3.1.01 The product has the ability to be updated to extend its useful life. TRUE

5.3.1.04 The data are available publicly (relates to UID 5.3.1.03). TRUE

5.3.1.02 The data are available publicly (relates to UID 5.3.1.01). TRUE

5.3.1.05 Requirements for product regular updates for functioning in a secure manner. FALSE

5.3.1.03 The product has the ability to be upgraded. TRUE

5.3.1.06 The data are available publicly (relates to UID 5.3.1.05). FALSE

1 2 3 4 5.Durability and extended lifetime 6 7

5.4.1.00 Demounting

5.4.1.01	The product has the ability to be demounted.	TRUE	5.4.1.05	The data are available publicly (relates to UID 5.4.1.04).	TRUE
5.4.1.02	The physical demounting of the product is enabled with reversible mounting hardware.	TRUE	5.4.1.13	Fraction of the product that is designed to be cleanly removed from the assembly where it is fixed is $99\% < X \leq 100\%$.	TRUE
5.4.1.03	The data are available publicly (relates to UID 5.4.1.02).	TRUE	5.4.1.14	The data are available publicly (relates to UID 5.4.1.06-13).	TRUE
5.4.1.04	The chemical demounting is enabled with reversible adhesives under certain conditions.	TRUE			

5.5.1.00 Disassembly

5.5.1.01	The product has the ability to be disassembled.	TRUE	5.5.1.10	The data are available publicly (relates to 5.5.1.02-09).	TRUE
5.5.1.09	Fraction of the product designed to be taken apart from the total product assembly in such a way that it can subsequently be reassembled and made operational is $99\% < X \leq 100\%$.	TRUE			

5.6.1.00 Reuse

5.6.1.01	The product has the ability to be reused as is.	TRUE	5.6.1.05	The typical average number of reuse cycles of the product is known.	FALSE
5.6.1.02	The data are available publicly (relates to UID 5.6.1.01).	TRUE	5.6.1.06	The data are available publicly (relates to UID 5.6.1.05).	FALSE
5.6.1.03	The typical average rate of reuse of the product type is known.	TRUE	5.6.1.07	The product has the ability to be reused by applying cascading principles to material application.	FALSE
5.6.1.04	The data are available publicly (relates to UID 5.6.1.03).	TRUE	5.6.1.08	The data are available publicly (relates to UID 5.6.1.07).	FALSE

5.7.1.00 Refurbishing

5.7.1.01	The product has the ability to be refurbished.	TRUE	5.7.1.02	The data are available publicly (relates to UID 5.7.1.01).	TRUE
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*mandatory

1 2 3 4 5 **6.Circularity at end of product use period** 7

6.1.0.00 Product portion released into the environment during its use

6.1.0.02*	The product mass fraction known to be released from the product into the environment during use is $0\% < X \leq 10\%$.	TRUE		
6.1.0.09*	The data are available publicly (relates to UID 6.1.0.01-08).	TRUE		
6.1.0.10*	Fraction of the product known to be released has been designed for compatibility with the environment that it is released into.	TRUE		
6.1.0.11*	The data are available publicly (relates to UID 6.1.0.10).	TRUE		
6.1.0.12*			The fraction of product released into the environment has been deducted from the mass fraction from the original manufactured product so that the actual portion of the product that will be available for reuse or recycling after use is known.	TRUE
6.1.0.13*			The product is designed to avoid microparticle release that is not compatible with the environment it is released into.	TRUE
6.1.0.14*			The data are available publicly (relates to UID 6.1.0.13).	TRUE
6.1.0.15*			List of parts likely to have wear and tear resulting in a release into the environment is available publicly.	TRUE

6.2.0.00 Dismantling

6.2.1.01	The product has the ability to be dismantled.	TRUE	6.2.1.11	Availability of dismantling instructions.	TRUE
6.2.1.09	Fraction of dismantlable components that can be either reused or recycled is $99\% < X \leq 100\%$.	TRUE	6.2.1.12	The data are available publicly (relates to UID 6.2.1.11).	TRUE
6.2.1.10	The data are available publicly (relates to UID 6.2.1.02-09).	TRUE			

6.3.0.00 Remanufacturing

6.3.1.01	The product has the ability to be remanufactured.	TRUE	6.3.1.03	Product traceability is maintained even if identifying marks are lost during use before remanufacturing or during remanufacturing itself.	FALSE
6.3.1.02	The data are available publicly (relates to UID 6.3.1.01).	TRUE			

*mandatory

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6.4.0.00 Recycling

6.4.0.01*	The product is designed for cycling in the technical cycle.	TRUE	6.4.1.09	Fraction of product designed for recycling at a similar level of quality to the original input materials listed under product composition is 99 % < X ≤ 100 %.	TRUE
6.4.0.02*	The data are available publicly (relates to UID 6.4.0.01).	TRUE	6.4.1.10	The data are available publicly (relates to UID 6.4.1.02-09).	TRUE
6.4.0.03*	The product is designed for recycling to maintain material quality.	TRUE	6.4.1.11	Availability of dedicated collection systems.	TRUE
6.4.1.01	The product has the ability to be recycled at a similar level of quality to the original input materials listed under product composition.	TRUE			

6.5.1.00 Composting and biodegradability

6.5.0.01*	The product is designed for cycling in the biological cycle.	FALSE	6.5.1.05	The product has the ability for biodigestion.	FALSE
6.5.0.02*	The data are available publicly (relates to UID 6.5.0.01).	FALSE	6.5.1.06	The data are available publicly (relates to 6.5.1.05).	FALSE
6.5.1.01	The product has the ability for industrial composting.	FALSE	6.5.1.07	The product has the ability for cascading in the biosphere.	FALSE
6.5.1.02	The data are available publicly (relates to 6.5.1.01).	FALSE	6.5.1.08	The data are available publicly (relates to 6.5.1.07).	FALSE
6.5.1.03	The product has the ability for home composting.	FALSE	6.5.1.09	The product has the ability for full biodegradability.	FALSE
6.5.1.04	The data are available publicly (relates to 6.5.1.03).	FALSE	6.5.1.10	The data are available publicly (relates to 6.5.1.09).	FALSE

*mandatory

7.1.0.00 Environmental benefits		
7.1.1.01	The product has the ability to improve air quality by pollutant capture.	TRUE
7.1.1.02	The data are available publicly (relates to 7.1.1.01).	TRUE
7.1.1.03	The product has the ability to improve water quality by pollutant capture.	FALSE
7.1.1.04	The data are available publicly (relates to 7.1.1.03).	FALSE
7.1.1.05	The product has the ability to improve air quality by safely reusing pollutants as resources.	FALSE
7.1.1.06	The data are available publicly (relates to 7.1.1.05).	FALSE
7.1.1.07	The product has the ability to improve water quality by safely reusing pollutants as resources.	FALSE
7.1.1.08	The data are available publicly (relates to UID 7.1.1.07).	FALSE
7.1.1.09	The product has the ability to increase renewable energy supply or storage capacity.	FALSE
7.1.1.10	The data are available publicly (relates to UID 7.1.1.09).	FALSE

*mandatory