



Flumroc AG

has successfully achieved Cradle to Cradle Certified® Bronze for the product(s) under the name:

Flumroc Schweizer Steinwolle / Flumroc Swiss Stone Wool

Certification Number
6612

Standard Version
4.0

Lead Assessment Body
Vugge til Vugge ApS

Material Health
Assessment Body
ARCHE Consulting

Effective Date
04 March 2024

Expiration Date
03 March 2027

Please see the List of Certified Products (available on the Cradle to Cradle Certified Product Registry) for all products covered within this certificate.

Number of final manufacturing sites: 1, Switzerland.

Number of tier 1 suppliers by country, Switzerland: 5; Germany: 3; France: 1; Belgium: 1; Austria: 1; Netherlands: 1; Italy: 1; USA: 1.

Number of suppliers of high-risk components and raw materials by country: 0

A handwritten signature in blue ink, appearing to read "Elwyn Grainger-Jones".

Elwyn Grainger-Jones
Executive Director
Cradle to Cradle Products Innovation Institute

C2C Certified Material Health Certificate™

BRONZE LEVEL



ISSUED TO Flumroc AG

Flumroc Schweizer Steinwolle / Flumroc Swiss Stone Wool

STANDARD VERSION 4.0 EFFECTIVE DATE 4 March 2024 EXPIRATION DATE 3 March 2027

LEAD ASSESSMENT BODY Vugge til Vugge ApS MATERIAL HEALTH ASSESSMENT BODY ARCHE Consulting

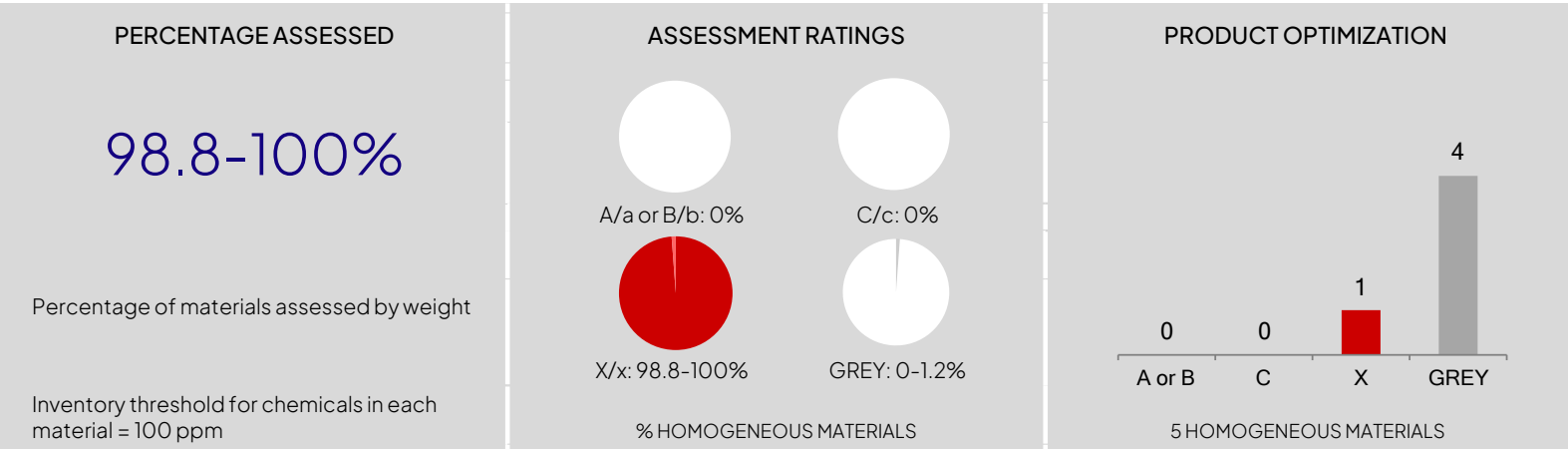
PHASES AND PROCESSES CONSIDERED IN THE CHEMICAL TOXICITY ASSESSMENT
Final manufacturing; Professional use; Use; Intended end of use: recycling; Unintended end of use: landfilling, incineration, uncontrolled burning, release to the environment

PRODUCTS COVERED
Please see the List of Certified Products (available on the Cradle to Cradle Certified Product Registry) for all products covered within this certificate.

Number of final manufacturing sites: 1, Switzerland.
Number of tier 1 suppliers by country, Switzerland: 5; Germany: 3; France: 1; Belgium: 1; Austria: 1; Netherlands: 1; Italy: 1; USA: 1.
Number of suppliers of high-risk components and raw materials by country: 0

PRODUCT OPTIMIZATION SUMMARY

- Cradle to Cradle Certified Restricted Substances List compliant
- Organohalogen substances of special concern and functionally-related non-halogenated classes of equivalent concern are below allowable thresholds (exemptions apply)
- No exposure to EU CLP Category 1 & 2 Carcinogens, Mutagens and Reproductive toxicants or Substances of Very High Concern; Carbon-bonded halogens are <1% of each material (exemptions apply)
- VOC emissions testing not required
- VOC content requirements not applicable
- Product is optimized for material health (no grey or x-assessed chemicals)
- Process chemicals are assessed and optimized
- Actions taken to reduce and eliminate emissions of hazardous chemicals in the product's supply chain



More information at www.c2ccertified.org/

MHC #6612

Cradle to Cradle Certified® Circularity Data & Cycling Instructions

Product Name: **Flumroc Swiss Stone Wool**

Certification Level: **Bronze**

Company Name: **Flumroc AG**

Product Circularity Level: **Gold**

Certification #: **6612**

Circular Sourcing	1	Cycled content type:	Pre-consumer recycled content (32,31% - 40%), Post-consumer recycled content (0,94% - 20%)
		Description of cycled content source:	Recycling content is average per year. Pre-consumer is mainly production waste and by-products from steel industry post-consumer is mainly stone wool from building deconstruction.
	2	Potential contaminants tested in recycled content:	Toxic metals, Radioactivity
		Description of tests conducted and recycled content materials tested:	The stone wool is tested for toxic metals and radioactivity according to the requirements in the C2C Geological Materials Assessment Methodology.
	3	Biomass source of renewable material in the product:	
		Description of renewable material source:	None
	4	Potential contaminants tested in renewable content:	
		Description of tests conducted and renewable materials tested:	
	5	Source of virgin non-renewable material in the product:	Geologic (70% - 80%)
		Description of virgin non-renewable material source:	Stones from quarry (CH, A, D), Cement used in briquettes.
6	Potential contaminants tested in virgin non-renewable content:	Radioactive elements , Toxic metals	
	Description of tests conducted and non-renewable materials tested:	Stones from quarry (CH, A, D), Cement used in briquettes.	
Circular Design	1	Product's intended cycle:	Designed for technical cycling
	2	Design for maintenance, repair, or refurbishment:	Not designed for maintenance, repair, or refurbishment
	3	Product defined functional use period:	50 years and longer
	4	Intended cycling pathway(s):	Reuse, Recycling
Description of tests conducted to support cycling via the intended pathway(s):			
Circular Systems	1	Circularity, material health, or other related certifications or standards, that have been obtained for the product, restricted substance/chemical lists and/or related chemical or circularity regulations:	EUCEB; RAL
	2	Intended disassembly and extraction scenarios:	Product is designed for clean extraction (without damaging or contaminating product or building)
	3	Reverse logistics mechanism in place for extraction and reprocessing of the product:	De-installation and extraction (through dedicated take-back), Transport (through dedicated take-back), Drop-off point (through dedicated take back), Reprocessing of materials (through dedicated take-back)
Description of reverse logistics in place for extraction and reprocessing of the product:		Under the section "Making Reverse Logistics Work" on the website linked below, the Rockcycle scheme's reverse logistics are illustrated: https://www.rockwool.com/group/about-us/sustainability/rockcycle/	
Cycling Instructions	1	Procedure for identification of homogeneous materials in the product intended for cycling:	The stone wool fibers are considered compatible for high-value recycling. End-of-life Swiss Stone Wool products can be remelted in the cupola oven at 1500 degrees Celsius. This process substitutes virgin stone melt ingredients without any loss of product quality, functionality, or material durability. Additionally, the remelted material does not contain any low-value additives.
	2	Instructions for the cleaning, maintenance, and repair of the product or a link to where these instructions may be found (if cleaning, maintenance, or repair is required during product use):	No maintenance or repair is required during the product's use phase. This information is also stated in the Environmental Product Declaration (EPD) for Swiss Stone Wool products. The EPD is available on the website provided below: https://www.flumroc.ch/fileadmin/Datelliste/flumroc/Downloads/30_Zertifikate/35_EPD/EPD__08.2021.pdf
	3	Instructions for the extraction, recovery, disassembly, and reprocessing of the product or a link to where these instructions may be found:	Used stone wool or cuttings can be returned to Flumroc. At Flumroc, recycling material is shredded, mixed with other raw materials, and melted for the production of new stone wool. Since the product is only sold in Switzerland, the take-back system is applicable only to that country. The information sheet for Flumroc stone wool waste, provided in the "Download" section of the link below, describes how end-of-use stone wool products should be collected, quality-checked, and stored for transportation back to the facility.