






LEED version 4.1.

PRODUCT DATA FOR CERTIFICATION

SUPAFIL BLOWING WOOL

LEEDv4.1 (Leadership in Energy and Environmental Design) is a voluntary standard that defines high performance green buildings which are healthier, more environmentally responsible, and more profitable structures. Credits for certification can be earned in various categories, each with a unique focus on sustainable design: sustainable sites, water efficiency, energy and atmosphere, materials and resources, indoor environmental quality, innovation and design process.

KNAUF INSULATION products can put you on the right track for the highest result into the certification!

LEED - Credit Category code	Definition	Knauf Insulation Products contribution	Contributes towards
Energy and Atmosphere (EA) Optimize Energy Performance 	To achieve increasing levels of performance beyond the prerequisite standard to reduce environmental and economic harms associated with excessive energy use.	SUPAFIL products help reducing energy demand through very high insulation efficiency (building envelop, partition walls, floors and ceilings).	18 points
Materials and Resources (MR) Building Product Disclosure and Optimization – Environmental Product Declarations 	To encourage the use of products where Life Cycle Assessment (LCA) is available and have environmentally, economically and socially preferable LCA. To reward project including products with verified LCA.	Third party verified Environmental Product Declarations (EPDs) are available on line for SUPAFIL products ¹ .   	2 points
Materials and Resources (MR) Building Product Disclosure and Optimization – Sourcing of Raw Materials 	To encourage the use of products where LCA is available and have environmentally, economically and socially preferable LCA. To reward project including products verified to be extracted or sourced in a responsible manner.	SUPAFIL Products are manufactured with up to 80% of recycled content (pre-consumer and post-consumer waste) ² .	1 point




¹ https://www.knaufinsulation.com/download-epd-glass-mineral-wool?environmental_product_declaration%5B1%5D=69&page=2; <https://ibu-epd.com/>; <https://www.inies.fr>; <https://www.environdec.com/EPD-Search/?query=knauf>

² See annex 1

LEED version 4.1.

PRODUCT DATA FOR CERTIFICATION

SUPAFIL BLOWING WOOL

LEED - Credit Category code	Definition	Knauf Insulation Products contribution	Contributes towards
Materials and Resources (MR) Building Product Disclosure and Optimization – Material Ingredients	To encourage the use of products where LCA is available and have environmentally, economically and socially preferable LCA. To reward project for which the products chemical ingredients are inventoried.	SUPAFIL products contains no ingredients listed on the REACH Authorization or Candidate list or Substances of Very High Concern. Supafil is certified DECLARE LBC Red List Free which means no harmful chemical substances ³ 	1 point
Indoor Environmental Quality (EQ) Low-Emitting Materials 	To reduce concentrations of chemical contaminants, as Volatile Organic Compound (VOC) that can damage air quality, human health, productivity and the environment. Emissions from ceilings, walls, thermal, and acoustic insulation are a complete category to be assessed.	SUPAFIL products are compliant with the German AgBB Testing and Evaluation Scheme and the higher category (A+) of the French labelling. The binder is without added phenol formaldehyde. Products with or without facing are certified for Indoor Air Comfort ⁴ Eurofins Gold and Blue Angel ⁵ . 	3 points
Indoor Environmental Quality (EQ) Acoustic Performance	To provide spaces that promote occupants' well-being, productivity and communication through effective acoustic design.	SUPAFIL products have high performance acoustic properties. Products increase sound insulation of building envelope, partitions, ceilings and aid in controlling reverberation time. ⁶	1 point
Indoor Environmental Quality (EQ) Thermal Comfort	To promote occupants productivity, comfort, and well-being by providing quality thermal comfort.	Insulation is a design alternative strategy. Heat radiation and air-conditioning will be minimized which will have positive comfortability feel and increase productivity for workers.	1 point

³ For REACH compliance and DECLARE label, see annex 2

⁴ www.product-testing.eurofins.com and certificate in annex 3

⁵ <https://www.blauer-engel.de/en/s/knauf> and certificate in annex 3

⁶ Acoustic examples, see annexe 4

LEED version 4.1.

PRODUCT DATA FOR CERTIFICATION

SUPAFIL BLOWING WOOL

Annex 1: Materials and Resources: Sourcing of Raw Materials

Here below additional detailed information⁷ about pre-consumer waste (reintroduction of manufacturing scrap into another manufacturing process) and post-consumer waste (produced by the end consumer) utilized in the raw materials batch for the manufacturing of the Supafil mineral wool.

In LEED, total recycled content is the sum of 100% post-consumer recycled content plus 50% of the pre-consumer recycled content.

	Visé (B)	Lannemezan (Fr)	Cwmbran (UK)	St Helens (UK)
%pre-consumer waste content	10.5%	4.3%	1.7%	0%
% post-consumer waste content	60.3%	58.7%	62.3%	79.5%
Total recycled content (100% pre-consumer+50% post-consumer)	65.6%	60.8%	63.1%	79.5%
LEED MR 4	contributes towards 2 points			

Recycled content claims must conform to the definition ISO 14021-1999.


Pre-consumer waste: waste comes from process waste that is used to make a different product. This definition does not include in-house industrial scrap or trimmings, which are normally fed back into the same manufacturing process.

Post-consumer waste: waste which comes from curbside recycling programs (glass, plastic, paper, ect). Other postconsumer feedstock is generated when construction and demolition debris is recycled. To be a feedstock, the raw materials must have served a useful purpose in the consumer market before being used again.

⁷ Data 2019

LEED version 4.1. PRODUCT DATA FOR CERTIFICATION SUPAFIL BLOWING WOOL

Annex 2: REACH Compliance letter and DECLARE label.



May 1st 2020

SUBJECT: Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)-
Regulation (EC) No 1907/2006

Dear Customer

Thank you for your enquiry with regard to the following products: –

KNAUF INSULATION GLASS BLOWING WOOL PRODUCTS

Knauf Insulation has registered Mineral Wool Insulation fibre; manufactured or Imported by its legal entities and used in the manufacture of the products listed above, under the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH); Regulation (EC) No 1907/2006.

The registered fibers meet the following definition:-


- EC number: 926-099-9 • Definition: Man made vitreous (silicate) fibres with random orientation with alkaline and alkali earth oxides (Na₂O+K₂O+CaO+MgO+BaO) content greater than 18% by weight and fulfilling one of the note Q conditions. • Public name: MMVF note Q fibre • Classification: Not classified (manmade vitreous (silicate) fibre with and index number of 650016-00-2 fulfilling one of the note Q conditions in the Classification, labelling, packaging regulations (CLP) (EC) No 1272/2008, as amended in regulation (EC) No 790/2009 and thus exempted from classification.

The registration is confirmed by the receipt of registration numbers for each of the listed legal entities by The European Chemical Agency (ECHA). The registration numbers are included on the relevant company product safety data sheets.

Knauf Insulation Glass Blowing Wool products do not contain any substances listed under the Candidate List of Substances of Very High Concern for Authorisation in concentration higher than 0.1% (w/w).

If you have any questions please do not hesitate to contact us; details below

Bruno Bilki
Product Stewardship & Standardization Manager
sds@knaufinsulation.com



Knauf Insulation SPRL
Rue de Maestricht 55, B-4000 Vise - Belgium
www.knaufinsulation.com

LEED version 4.1.
PRODUCT DATA FOR CERTIFICATION
SUPAFIL BLOWING WOOL

Declare.

SUPAFIL
(Loft,Thermoloft,Optiloft,Cavity,Timber
Frame,Max Frame,CarbonPlus&Spray
Blowing Wool)
Knauf Insulation

Final Assembly: Multiple Locations in Europe

Life Expectancy: Life of Structure Year(s)

End of Life Options: Salvageable/Reusable in its Entirety,
Landfill

Ingredients:

Glass mineral wool: EC: 926-099-9 Man-Made Vitreous (silicate)
Fibers; **Silicone:** Siloxanes and Silicones, di-Me; **Dust Oil:**
Distillates (petroleum), solvent-dewaxed light paraffinic;
Antistatic Agent: Quaternary ammonium compounds,
ethyldimethylsoya alkyl, Et sulfates

Living Building Challenge Criteria: Compliant

I-13 Red List:

- | | |
|---|-----------------------------|
| <input checked="" type="checkbox"/> LBC Red List Free | % Disclosed: 100% at 100ppm |
| <input type="checkbox"/> LBC Red List Approved | VOC Content: Not Applicable |
| <input type="checkbox"/> Declared | |

I-10 Interior Performance: AgBB Scheme French A+ 2011

I-14 Responsible Sourcing: Not Applicable

KNF-0040
EXP. 01 APR 2021
Original Issue Date: 2020

MANUFACTURER RESPONSIBLE FOR LABEL ACCURACY
INTERNATIONAL LIVING FUTURE INSTITUTE™ living-future.org/declare

LEED version 4.1.
PRODUCT DATA FOR CERTIFICATION
SUPAFIL BLOWING WOOL

Annex 3: Indoor Environmental Quality - Low-Emitting Materials

Here below the Eurofins Indoor Air Comfort Gold Certificate for Blowing products:



LEED version 4.1.
PRODUCT DATA FOR CERTIFICATION
SUPAFIL BLOWING WOOL



Appendix to Certificate

IACG-323-01-33-2017

Knauf Insulation

receives the Indoor Air Comfort Gold certificate with validity 19 June 2022 for below product group, including subgroups and individual products listed in the following table:

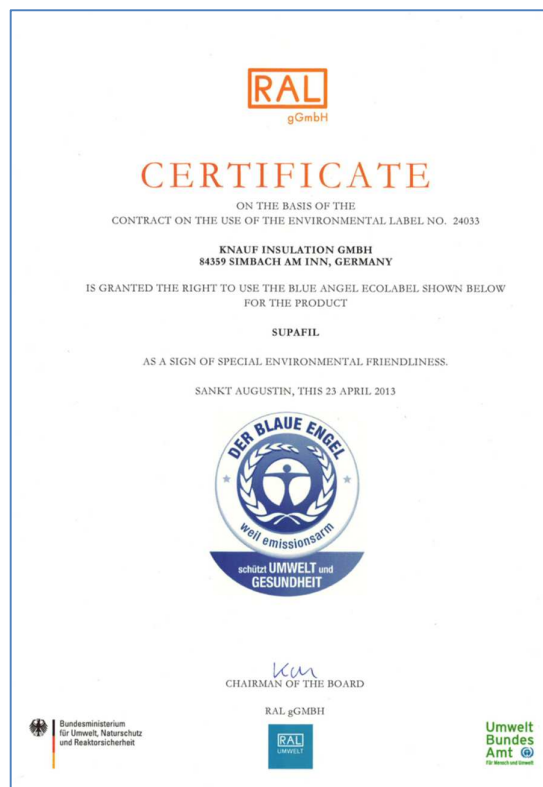
Product group	Production site
Knauf Insulation Virgin Blowing Wool and Supafil	Cwmbran, United Kingdom Lannemezan, France St Helens, United Kingdom Vise, Belgium

The products in this group are based on identical or similar recipe and are produced under equivalent conditions. Grouping of the products and inspection of the production process is part of the Indoor Air Comfort Gold certification. A worst-case product, which is representative for the whole group, is being tested frequently.


Product Testing

LEED version 4.1.
PRODUCT DATA FOR CERTIFICATION
SUPAFIL BLOWING WOOL

Here below the Blue Engel Certificate for low-emission materials for Supafil products:



Supafil

Category : Low-Emission Thermal Insulation Material and Suspended Ceilings for Use in Buildings (until 12/2020) (DE-UZ 132)

Website : <https://www.blauer-engel.de/en/products/construction-heating/thermal-insulation-material-indoor-until-12-2020/supafil>

Currently there are no detailed product information provided by company.

Benefits to Environment and Health

1. low emissions
2. low pollutant content
3. no adverse impact on health in the living environment

LEED version 4.1.

PRODUCT DATA FOR CERTIFICATION

SUPAFIL BLOWING WOOL

Annex 4: Indoor Environmental Quality – Sound Reduction Index Example for Supafil

STC_c in USA is composite *Sound Transmissions Class* and is equivalent to *R_w Sound Reduction Index* in Europe. α coefficient is the coefficient for *sound absorption*.

System Timber Frame Wall
➤

1 Empty cavity

- ➊ External Sheathing - OSB panel 15 mm
- ➋ Wood studs - height 180 mm
centre-to-centre distance 600 mm
- ➌ Empty cavity - 180 mm
- ➍ Vapor Control Layer
- ➎ Secondary wood structure - 2x27 mm
- ➏ Standard Type A Gypsum board - 2x12,5 mm

Total thickness of the wall : 274 mm
Sound Reduction Index :
R_w 44 (-2 ; -8)

2 Blowing Wool (Supafil)

- ➊ External Sheathing - OSB panel 15 mm
- ➋ Wood studs - height 180 mm
centre-to-centre distance 600 mm
- ➌ Blowing wool - Supafil Timber Frame -
density 35 kg/m³ - 180 mm
- ➍ Vapor Control Layer
- ➎ Secondary wood structure - 2x27 mm
- ➏ Standard Type A Gypsum board - 2x12,5 mm

Total thickness of the wall : 274 mm
Sound Reduction Index :
R_w 48 (-4 ; -10)

LEED version 4.1.
PRODUCT DATA FOR CERTIFICATION
SUPAFIL BLOWING WOOL

