

ENVIRONMENTAL DECLARATION

IN ACCORDANCE WITH THE SAINT GOBAIN PCR

SUPERBAC N ROOFINE sp 100 mm
SEPTEMBER 2011



Product Characterization

- Definition of functional unit (FU) :
- By considering the functions of this product, the functional unit can be described as follows:
Providing a thermal insulation on 1 m2, during an annuity, whilst ensuring the stipulated product performance.

Construction product: The product in question is SUPERBAC N ROOFINE whose main function is thermal insulation. The thermal resistance of the product equals 2.70 K.m2.W-1.

Including:

- Quantity of wool for 1 m2 of product : 9.7 kg
- Thickness of wool : 100 mm,
- Packaging for the distribution and transportation: Polyethylene :13.99 g/m²
- Product used for the implementation (nature and quantity): None
- Scrap rate during the implementation and maintenance: (including replacement part if any): 5 %
- Typical life time (TLT) : 50 years
- Technical information not including in the functional unit:
See the technical documentation for more technical characteristics.

Notes :

(1) Environmental impact are defined and calculated according to the French standard NF P01 010 for the full life cycle

(2) The total primary energy represents the sum of energy sources directly extracted from the natural resources (natural gas I, oil, coal, uranium ore, biomass, hydraulic energy, solar energy, wind energy, geothermal energy...)

(3) The use of insulating material is to reduce energy consumption and reducing emissions arising during the step "life in use". The last columns to the right represent the "avoidance" due to the insulation. Where the sign "-" appears in the numerical values, it is the consequence of the difference between the flow of the ICV and the avoidance due to the insulation. The results are presented for the total life cycle based on the Typical Life Time of the product.

(4) No emission of CFCs or HCFCs

Environmental impact (total life cycle) (1)

N°	Environmental impact	Value by FU for TLT	Value by FU for TLT with avoidance due to insulation (3)
1	Consumption of energy resources (2) Total primary energy Renewable energy Non renewable energy	364 MJ 21.9 MJ 342 MJ	-16283 MJ -584 MJ -15968 MJ
2	Depletion of natural resources (ADP)	0.162 kg antimony equivalent (Sb)	-2.46 kg antimony equivalent (Sb)
3	Water consumption	413 litre	-1928 litre
4	Solid waste Recovered waste (total) Eliminated waste : Hazardous waste Non hazardous waste Inert wastes Radioactive waste	0.687 kg 0.0624 kg 11.1 kg 0.700 kg 1.47 E-03 kg	-0.496 kg -1.35 kg -3.24 kg -11.2 kg -0.141 kg
5	Climate change	22.0 kg CO2 equivalent	-351 kg CO2 equivalent
6	Atmospheric acidification	0.191 kg SO2 equivalent	-0.553 kg SO2 equivalent
7	Air pollution	2427 m3	-9370 m3
8	Water pollution	6.28 m3	-107 m3
9	Destruction of stratospheric ozone layer	N/A (4)	N/A (4)
10	Formation of photochemical ozone	0.0113 kg ethylene equivalent	-0.0884 kg ethylene equivalent
Another indicator (non-standard NF P01-010)			
11	Eutrophication	0.57 g PO4 3- equivalent	-0.7125 g PO4 3- equivalent

For more information:

Company name: Saint-Gobain – PPC Italia S.p.A
Customer Service Isover Saint-Gobain Tel: +39 0363 318400
Fax: +39 0363 318337
E-mail : info.it.isover@saint-gobain.com

Inventories of life cycle have been made in 2010 and aggregation of data is calculated from the TEAM software version 4.0.