

Declaration of ecological properties of fibre cement

Declaration framework of the Swiss Society of Engineers and Architects. Up to now, there is no corresponding standard in the EU or in the US

Created / revised on	06.05.2003/15.06.06/05.09.07	Number of data sheet	DEP 001
Date of printing	07.09.07	Page	1 of 5
Description	FACADE PANELS SWISSPEARL® NATURA, TECTURA, XPRESSIV AND REFLEX		

0. Product identification

01. General information

Product	Facade panels Swisspearl® Natura, Tectura, Xpressiv and Reflex
Manufacturer	Eternit (Schweiz) AG
Declared by	Christian Heierli / Christoph Weder
Classification as	fibre cement product
Date	31.01.2002 / 05.09.2007

02. Definition of the scope of declaration

021. Coatings and surface treatments (inc. degreasing, pickling, cleaning, priming, coating, etc.)

- none
- as solid constituents of the product
- available as a product variant
- declared in this framework
- declared separately

022. Composite materials such as laminates, base materials, reinforcements

- none
- as solid constituents of the product
- available as a product variant
- declared in this framework
- declared separately

04. Physical characteristics (of hardened and dried product)

- 041 **Apparent density**
1900 kg/m³
- 042 **Mass per unit of surface area**
15.3 to 15.4 kg/m²

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1. Manufacture

11. Composition (total of all figures: 100 % mass)

	Primary raw material (% mass)	Recycled material (% mass)	Detailed description
111. Renewable primary products			
1.0	1.5	Cellulose	
112. Physically treated mineral substances			
3.7	0.0	Limestone flour, etc.	
113. Thermally produced mineral substances			
78.6	0.0	Cement	
114. Base chemicals			
0.0	0.0		
115. Plastic and similar substances			
3.7	0.0	Polyvinyl alcohol, etc.	
116. Metals and metal compounds			
0.0	0.0		
117. None classifiable substances			
0.0	0.0		
118. Water			
11.5	0.0	chemically linked	

12. Solvent emission

121. Coatings and surface treatments (inc. degreasing, pickling, cleaning, priming, coating, etc.)

- none
- 6.1 g/m²
- LRV ¹⁾ class 3
- LRV ¹⁾ class 2
- LRV ¹⁾ class 1

Pretreatment: -
Surface treatment: -

¹⁾ LRV = Clean Air Ordinance in Switzerland

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122. Gluing of the product

- none
- 6.1 g/m²
- LRV ¹⁾ class 3
- LRV ¹⁾ class 2
- LRV ¹⁾ class 1

13. Grey energy

131. Availability of transparent calculation principles

- not available
- available from the declaring party on request

132. Cumulative primary energy requirement per unit of mass

8.3 MJ/kg (total)
30 % proportion of renewable energy sources

133. Scope of validity of the figures

- all constituents of the product have been considered
- the following constituents of the product have not been considered

2. Processing

21 Occupational health risks

212. Proportion of sensitising agents in untreated starting materials

- none
- 0.03 % mass chromate (from cement)

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3. Use

31 Constituents of ecological and toxicological relevance

- none
 information not available

Chemical description	Proportion by mass in the product (%)	Poison class according to the Poison Ordinance in Switzerland ¹⁾	Risk phrases according to EU law ²⁾	Dangerous to the ozone layer (R59)
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¹⁾ Substances of Poison class 1 – 4 must be declared

²⁾ The following risk phrases must be declared

- R22 Harmful if swallowed
- R25 Toxic if swallowed
- R28 Very toxic if swallowed
- R33 Danger of cumulative effects
- R39 Danger of very serious irreversible effects
- R40 Possible risk of irreversible effects
- R45 May cause cancer
- R46 May cause heritable genetic damage
- R47 May cause birth defects
- R48 Danger of serious damage to health by prolonged exposure
- R50 Very toxic to aquatic organism
- R51 Toxic to aquatic organism
- R52 Harmful to aquatic organism
- R53 May cause long-term adverse effects in the aquatic environment

32 Emittable pollutants

322. Heavy metals from coatings and surface treatments

- none
 Information not available
 as follow

0.2 g/m² chrome, cobalt, nickel, zinc

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4. Disposal

41 Utilization

412. Recycled mineral building materials

- BUWAL ²⁾ guideline satisfied
 BUWAL ²⁾ guideline not satisfied

43 Disposal on landfill sites

431. Landfill type (according to TVA ³⁾)

- not relevant, since combustible
 Inert material landfill
 Reactor landfill

5. Additional information available

51 Remarks

52 Further information about this product can be obtain from:

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²⁾ BUWAL = Swiss Federal Office for the Environment, Forestry and Landscape

³⁾ TVA = Industrial Waste Ordinance in Switzerland