

## Appendix to Certificate of Approval

Appendix Number: ENP500aq Issue: 3

**Kingspan Insulation Ltd**  
 Pembridge  
 Leominster  
 Herefordshire  
 HR6 9LA



Characterised and normalised data for:

### Insulation: Insulation

Kingspan Kooltherm K103 (0.018 W/m.K) with 70gsm glass fibre facer on both sides - 35 kg/m<sup>3</sup>

1 m<sup>2</sup> over 60-year study period

#### Quality of data for profiled material

Start date	01/01/2015
End Date	31/12/2015
Representativeness	2 sites representing 100% production
LCA Methodology	BRE Environmental Profiles Methodology 2008
Allocation	100% to product
Date of data entry	13/06/2017
Boundary	Cradle to Grave over 60-year study period
Applicable buildings	All building types
Source of data	Company records
Geography	UK and Ireland

(Data for other constituent materials are available from BRE Global)

#### BRE Ecopoints score: 0.0247 Ecopoints

This certificate appendix is maintained and held in force through annual review and verification.

Signed for BRE Global Ltd.

Emma Baker  
 Scheme Manager

28 July 2017  
 Date of Issue

27 July 2020  
 Expiry Date



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### Kingspan Insulation Ltd

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### Insulation: Insulation

Kingspan Kooltherm K103 (0.018 W/m.K) with 70gsm glass fibre facer on both sides - 35 kg/m<sup>3</sup>

**1 m<sup>2</sup> over 60-year study period**

### Characterised Data

Issue	Value	Unit
Climate Change	5.55	kg CO <sub>2</sub> eq. (100 yr.)
Water Extraction	0.066	m <sup>3</sup>
Mineral Resource Extraction	0.000716	tonnes
Stratospheric Ozone Depletion	0.00000354	kg CFC11 eq.
Human Toxicity	1.62	kg 1,4-DB eq.
Ecotoxicity to Freshwater	0.115	kg 1,4-DB eq.
Nuclear Waste (higher level)	0.00000000746	m <sup>3</sup> high level waste
Ecotoxicity to Land	0.0179	kg 1,4-DB eq.
Waste Disposal	2.5	kg
Fossil Fuel Depletion	131	MJ
Eutrophication	0.00443	kg PO <sub>4</sub> eq.
Photochemical Ozone Creation	0.0149	kg ethene eq.
Acidification	0.0317	kg SO <sub>2</sub> eq.

### Normalised data

Issue	Value	Western European Citizen's Annual Impacts
Climate Change	0.000451	12300 kg CO <sub>2</sub> eq. (100 yr.)
Water Extraction	0.000175	378 m <sup>3</sup>
Mineral Resource Extraction	0.0000294	24.4 tonnes
Stratospheric Ozone Depletion	0.0000163	0.217 kg CFC11 eq.
Human Toxicity	0.000082	19700 kg 1,4-DB eq.
Ecotoxicity to Freshwater	0.0000875	1320 kg 1,4-DB eq.
Nuclear Waste (higher level)	0.000315	2.37 x 10 <sup>-5</sup> m <sup>3</sup> high level waste
Ecotoxicity to Land	0.000146	123 kg 1,4-DB eq.
Waste Disposal	0.000667	3750 kg
Fossil Fuel Depletion	0.000481	273 GJ
Eutrophication	0.000136	32.5 kg PO <sub>4</sub> eq.
Photochemical Ozone Creation	0.00069	21.5 kg ethene eq.
Acidification	0.000445	71.2 kg SO <sub>2</sub> eq.

**BRE Ecopoints score: 0.0247 Ecopoints**

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Emma Baker

Scheme Manager

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