0239-L-21/7 REV 01
10 March 2023

Test report

AllShield® Blue 2C + EKLTM 800/450 reinforcement / glass fleece 100 g.m^{-2} / EPS 100 SE / trapezoidal steel deck

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Kiwa BDA Testing B.V.
Avelingen West 35-37
P.O. Box 389
4200 AJ Gorinchem
The Netherlands

Tel. +31 183 669 690
testing@bda.nl
www.kiwabda.nl

Commercial register Registered by Chamber of Commerce
Midden Nederland 23059445

Details

Principal	Allshield Coatings B.V. Hoogeveenenweg 29 NL-2913 LV NIEUWERKERK A/D IJSSEL
Contact person	K.D.K. Leendertse
Email	kl@allshieldcoatings.com
Date of order	12-05-2021
Project number	0239-L-21/1
Author	R.J. de Jongh W.J.B. Middag
Subject	test on external fire exposure to roofs according to CEN/TS 1187, test 1

This test report is additional to the original test report issued as order number 0239-L-21/1 dated 10 August 2021. The original test report remains valid and has not been replaced by this additional test report.

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1 Introduction

By order of Allshield Coatings B.V., Kiwa BDA Testing B.V. has determined the performance of roofs to external fire exposure according to CEN/TS 1187, test 1, on a roof waterproofing system consisting of:

- supporting deck of a **trapezoidal steel deck**;
- mechanically fastened insulation, **EPS 100 SE** in combination with a **metal point fastener** fastening system;
- separation layer of a glass fleece 100 $g.m^{-2}$;
- single layer roof waterproofing system with a top layer of an **AllShield® Blue 2C** coating in combination with an **EKLTM 800/450 reinforcement** fully bonded on the separation layer.

The suppliers and the delivery dates of the products used are mentioned below.

Table 1 – Specifications of the products used

Product	Supplier		Delivery date
	company	person	
Supporting deck	Kiwa BDA Testing B.V.	-	21-06-2021
Thermal insulation	Kiwa BDA Testing B.V.	-	21-06-2021
Fastening system	Kiwa BDA Testing B.V.	-	21-06-2021
Separation layer	Kiwa BDA Testing B.V.	-	21-06-2021
Roof waterproofing sheet (reinforcement combination)	Allshield® Coatings B.V.	G. Souter K. Pitura	21-06-2021

See annex IV for photos of the products and further package data.

This test report is additional to the original test report issued as order number 0239-L-21/1, dated 10 August 2021. The original test report remains valid and has not been replaced by this additional test report.

This product has not been retested. In the original test report some incorrect data appeared to be incorporated. This test report replaces the original test report 0239-L-21/7 dated 21 February 2023 which herewith has been withdrawn.

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2 Test specimens

On 21 June 2021 the test specimens have been built up by Mr R.J. de Jongh of Kiwa BDA Testing B.V. in the presence of Mr G. Souter, Mr K. Pitura and Mr R. Dijkhuizen of Allshield® Coatings B.V.

According to the prescription of the principal the test specimens (according to CEN/TS 1187, § 4.4.3.1) have been built using the following products from the bottom up.

- Supporting deck : trapezoidal steel deck, 106 profile, thickness 0,75 mm

- Thermal insulation : EPS 100 SE
  - material : expanded polystyrene
  - type of facing : none
  - type of joint : butt joint / none
  - RtF class : E
  - thickness : 100 mm
  - density : 18,4 kg.m^{-3}
  - manufacturer/supplier : IsoBouw Systems B.V.
  - production code/date : I801893 21021B1
  - product standard : EN 13163

- Separation layer : uncoated glass fleece 100 g.m^{-2}
  - material : glass fleece
  - thickness : 0,64 mm
  - mass : 101 g.m^{-2}
  - manufacturer/supplier : Schuller GmbH
  - production code/date : 09.02.20
  - product standard : not applicable

- Coating : Allshield® Blue 2C
  - material : ceramic coating (two-component coating)
  - thickness : 2,9 mm (including reinforcement)
  - mass : 4,70 kg.m^{-2} (including reinforcement)
  - product code : not applicable
  - manufacturer/supplier : Allshield® Coatings B.V.
  - production code/date : 07-06-2021 / 2106001
  - product standard : not applicable

- Reinforcement : EKLTM 800/450
  - material : stitch - bonded composite reinforcement
  - thickness : 0,2 mm
  - mass : 189 g.m^{-2}
  - product code : not applicable
  - manufacturer/supplier : Pro-tech
  - production code/date : not revealed
  - product standard : not applicable

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The apparent mass, density or thickness where applicable, has indicatively been determined.

The top layer and the thermal insulation have been fastened to the supporting deck with a linear fastening system (metal strip and metal point fasteners; see photo 1 in annex I).

On 21 June 2021 the joints in the top layer have been made by Mr R. Dijkhuizen of Allshield® Coatings B.V.

The width of the overlaps has been set at 100 mm (longitudinal joint) and at 100 mm (transverse joint).

According to the prescription of the principal after the buildup and before testing the test specimen needs been stored in the laboratory for a period of at least 15 days. The effective storing period in the laboratory after the buildup and before the start of the test has been 15 days.

No actions have been taken to prevent the flames passing around the edges of the specimen.

The buildup is according to the Dutch KOMO directive BRL 1511:2015 – Baanvormige dakbedekkingssystemen – Deel 1: Algemene bepalingen[1], as well as according to the standard insulated test roof according to the Dutch standard NEN 6063:2019 – Bepaling voor het brandgevaarlijk zijn van daken[2].

[1] Roof waterproofing systems, Part 1 – General stipulations.

[2] Test method for external fire exposure to roofs.

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3 Investigation

The investigation has been performed in accordance with CEN/TS 1187:2012 – Test methods for external fire exposure to roofs, test 1 – Method with burning brands. By request of the principal the test has been performed at a slope of 15°.

A test is performed on four test specimens according to CEN/TS 1187, § 4.4.3.1: one test specimen of type 1, one test specimen of type 2 and two test specimens of type 3.

A metal basket filled with 600 grams of wood wool, previously conditioned at 23 °C and 50% relative humidity, is placed on a test specimen, after which the wood wool is ignited.

During and/or after the test the following parameters are observed, measured and recorded.

External fire spread

- The time when the sustained flaming has progressed upwards 100 mm, 300 mm, 500 mm and 700 mm from the upper edge of the projection of the brand on to the exposed specimen surface and when reaching the upper edge of the measuring zone (see annex II).
- The time when the sustained flaming has progressed downwards 100 mm, 300 mm and 500 mm from the lower edge of the projection of the brand on to the exposed specimen surface and when reaching the lower edge of the measuring zone (see annex II).
- The fire spread lateral to the edges of the measuring zone (see annex II).
- The time of occurrence and description of any burning material (flaming droplets or debris) falling from the exposed surface.
- The extent during the test of the external fire spread upwards downwards, to the right and to the left, expressed as the maximum burnt length from the edges of the projection of the brand onto the exposed surface, measured at the end of the test.
- The extent of external damage.

Fire penetration and openings

- The time of fire penetration, if this has occurred.
- The time of occurrence and description of any burning material (flaming droplets or debris) falling from the visible underside of the specimen.
- The time of occurrence of openings and their dimensions.

Damage

- The extent of internal damage upwards and downwards, measured after the test from the edges of the projection of the brand.
- The maximum length of burnt material upwards and downwards in each layer, measured after the test from the edges of the projection of the brand.
- The extent of internal damage.

At 60 minutes after the start of the test, after all the fire symptoms are gone or the fire has been extinguished (30 minutes after the beginning of the test), the roof is opened and checked for non-flaming fire propagation.

On 6 July 2021 the investigation has been performed by Mr W.J.B. Middag and Mr R.J. de Jongh of Kiwa BDA Testing B.V. in the presence of Mr R. Dijkhuizen of Allshield® Coatings B.V. in the fire laboratory of Kiwa BDA Testing B.V.

In annex I a photo report of the test and the test results is given.

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4 Results

4.1 Test specimen 1 (type 1)

4.1.1 Fire behaviour during the test

Description	**Result [min:s]**				
Roofing burning after Fire gone out after	roofing didn't ignite 5:03				
Fire spread [1]	**100 mm**	**300 mm**	**500 mm**	**700 mm**	**MZ** [2]
▪ upwards	- [3]	- [3]	- [3]	- [3]	- [3]
▪ downwards	- [3]	- [3]	- [3]	n.a.	- [3]
▪ lateral (left)	n.a.	n.a.	n.a.	n.a.	- [3]
▪ lateral (right)	n.a.	n.a.	n.a.	n.a.	- [3]

[1] Length of damage area measured from the edge of the basket.
[2] Edge measuring zone.
[3] Not been reached.

4.1.2 Special observations made during the test

Description	**Results**
Temperature in the test room before the start of the test	22 °C
Smoke coming out of the edges	none
Occurrence of explosion	none
Flaming droplets or debris falling from the exposed surface	none
Fire penetration of the specimen	none
Flaming droplets or debris falling from the underside of the surface	none
Test specimen opened	after 60 minutes
Presence of glowing parts 60 minutes after the start of the test	no

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4.1.3 *Measurements made after the test*

Description	Results
External fire spread / burnt length [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
▪ lateral (left)	0 mm
▪ lateral (right)	0 mm
Internal fire spread glass fleece [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
Internal fire spread insulation [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
Internal fire spread supporting deck [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
Through openings	
▪ number of openings (> 25 mm^2)	0
▪ number of cracks (> 2 mm wide)	0
▪ total area (openings and cracks)	0 mm^2
Damaged area	
▪ external	0,08 m^2
▪ insulation	0,14 m^2
Damaged length (internal) glass fleece [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
Damaged length (internal) insulation [1)]	
▪ upwards	85 mm
▪ downwards	60 mm
Damaged length (internal) supporting deck [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
[1)] Length of damaged area measured from the edge of the basket.	

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4.2 Test specimen 2 (type 2)

4.2.1 Fire behaviour during the test

Description	**Result [min:s]**				
Roofing burning after Fire gone out after	roofing didn't ignite 4:35				
Fire spread [1]	**100 mm**	**300 mm**	**500 mm**	**700 mm**	**MZ** [2]
▪ upwards	- [3]	- [3]	- [3]	- [3]	- [3]
▪ downwards	- [3]	- [3]	- [3]	n.a.	- [3]
▪ lateral (left)	n.a.	n.a.	n.a.	n.a.	- [3]
▪ lateral (right)	n.a.	n.a.	n.a.	n.a.	- [3]

[1] Length of damage area measured from the edge of the basket.
[2] Edge measuring zone.
[3] Not been reached.

4.2.2 Special observations made during the test

Description	**Results**
Temperature in the test room before the start of the test	22 °C
Smoke coming out of the edges	none
Occurrence of explosion	none
Flaming droplets or debris falling from the exposed surface	none
Fire penetration of the specimen	none
Flaming droplets or debris falling from the underside of the surface	none
Test specimen opened	after 60 minutes
Presence of glowing parts 60 minutes after the start of the test	no

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4.2.3 *Measurements made after the test*

Description	Results
External fire spread / burnt length [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
▪ lateral (left)	0 mm
▪ lateral (right)	0 mm
Internal fire spread glass fleece [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
Internal fire spread insulation [1)]	
▪ upwards	0 mm
▪ downwards	5 mm
▪ maximum burnt length	5 mm
Internal fire spread supporting deck [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
Through openings	
▪ number of openings (> 25 mm^2)	0
▪ number of cracks (> 2 mm wide)	0
▪ total area (openings and cracks)	0 mm^2
Damaged area	
▪ external	0,08 m^2
▪ insulation	0,12 m^2
Damaged length (internal) glass fleece [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
Damaged length (internal) insulation [1)]	
▪ upwards	25 mm
▪ downwards	85 mm
Damaged length (internal) supporting deck [1)]	
▪ upwards	0 mm
▪ downwards	0 mm

[1)] Length of damaged area measured from the edge of the basket.

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4.3 Test specimen 3 (type 3)

4.3.1 Fire behaviour during the test

Description	**Result [min:s]**				
Roofing burning after Fire gone out after	roofing didn't ignite 4:39				
Fire spread [1]	**100 mm**	**300 mm**	**500 mm**	**700 mm**	**MZ** [2]
▪ upwards	- [3]	- [3]	- [3]	- [3]	- [3]
▪ downwards	- [3]	- [3]	- [3]	n.a.	- [3]
▪ lateral (left)	n.a.	n.a.	n.a.	n.a.	- [3]
▪ lateral (right)	n.a.	n.a.	n.a.	n.a.	- [3]

[1] Length of damage area measured from the edge of the basket.
[2] Edge measuring zone.
[3] Not been reached.

4.3.2 Special observations made during the test

Description	**Results**
Temperature in the test room before the start of the test	22 °C
Smoke coming out of the edges	none
Occurrence of explosion	none
Flaming droplets or debris falling from the exposed surface	none
Fire penetration of the specimen	none
Flaming droplets or debris falling from the underside of the surface	none
Test specimen opened	after 60 minutes
Presence of glowing parts 60 minutes after the start of the test	no

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4.3.3 *Measurements made after the test*

Description	Results
External fire spread / burnt length [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
▪ lateral (left)	0 mm
▪ lateral (right)	0 mm
Internal fire spread glass fleece [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
Internal fire spread insulation [1)]	
▪ upwards	0 mm
▪ downwards	10 mm
▪ maximum burnt length	10 mm
Internal fire spread supporting deck [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
Through openings	
▪ number of openings (> 25 mm^2)	0
▪ number of cracks (> 2 mm wide)	0
▪ total area (openings and cracks)	0 mm^2
Damaged area	
▪ external	0,08 m^2
▪ insulation	0,14 m^2
Damaged length (internal) glass fleece [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
Damaged length (internal) insulation [1)]	
▪ upwards	10 mm
▪ downwards	90 mm
Damaged length (internal) supporting deck [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
[1)] Length of damaged area measured from the edge of the basket.	

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4.4 Test specimen 4 (type 3)

4.4.1 Fire behaviour during the test

Description	**Result [min:s]**				
Roofing burning after Fire gone out after	roofing didn't ignite 4:40				
Fire spread [1]	**100 mm**	**300 mm**	**500 mm**	**700 mm**	**MZ** [2]
▪ upwards	- [3]	- [3]	- [3]	- [3]	- [3]
▪ downwards	- [3]	- [3]	- [3]	n.a.	- [3]
▪ lateral (left)	n.a.	n.a.	n.a.	n.a.	- [3]
▪ lateral (right)	n.a.	n.a.	n.a.	n.a.	- [3]

[1] Length of damage area measured from the edge of the basket.
[2] Edge measuring zone.
[3] Not been reached.

4.4.2 Special observations made during the test

Description	**Results**
Temperature in the test room before the start of the test	22 °C
Smoke coming out of the edges	none
Occurrence of explosion	none
Flaming droplets or debris falling from the exposed surface	none
Fire penetration of the specimen	none
Flaming droplets or debris falling from the underside of the surface	none
Test specimen opened	after 60 minutes
Presence of glowing parts 60 minutes after the start of the test	no

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4.4.3 *Measurements made after the test*

Description	Results
External fire spread / burnt length [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
▪ lateral (left)	0 mm
▪ lateral (right)	0 mm
Internal fire spread glass fleece [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
Internal fire spread insulation [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
Internal fire spread supporting deck [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
▪ maximum burnt length	0 mm
Through openings	
▪ number of openings (> 25 mm^2)	0
▪ number of cracks (> 2 mm wide)	0
▪ total area (openings and cracks)	0 mm^2
Damaged area	
▪ external	0,07 m^2
▪ insulation	0,08 m^2
Damaged length (internal) glass fleece [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
Damaged length (internal) insulation [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
Damaged length (internal) supporting deck [1)]	
▪ upwards	0 mm
▪ downwards	0 mm
[1)] Length of damaged area measured from the edge of the basket.	

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5 Field of application

This result is valid for the following conditions:

Range of pitches
- < 20°.

Range of decks
- Any profiled and non-perforated steel deck;
- Any non-combustible continuous deck with a minimum thickness of 10 mm.

Remarks:

The results are only related to the investigated samples, products and/or systems. Kiwa BDA Testing B.V. is not liable for interpretations or conclusions that are made in consequence of the results obtained.

The uncertainty of measurement is given in annex III.

If sampling was not performed by Kiwa BDA Testing B.V., no judgement can be given with regard to the origin and representativeness of the samples.

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Gorinchem, 10 March 2023
The laboratory

R.J. de Jongh
laboratory technician

Kiwa BDA Testing B.V.

N.W.J. Haanappel BSc
manager testing

Designated as Notified Body NB 1640 pursuant to the Construction Products Regulation (EU, No 305/2011)

TESTING RvA L 447

egolf

Member

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I Photo report of the test

Photo 1
The specimen is ready to be tested.

Photo 2
The basket filled with wood wool has been placed on test specimen 1.

Photo 3
The wood wool has been ignited.

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Photo 4
The burnt section of the roofing of test specimen 1.

Photo 5
The burnt section of the insulation of test specimen 1.

Photo 6
The burnt section of the supporting deck of test specimen 1.

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Photo 7
The burnt section of the roofing of test specimen 2.

Photo 8
The burnt section of the insulation of test specimen 2.

Photo 9
The burnt section of the supporting deck of test specimen 2.

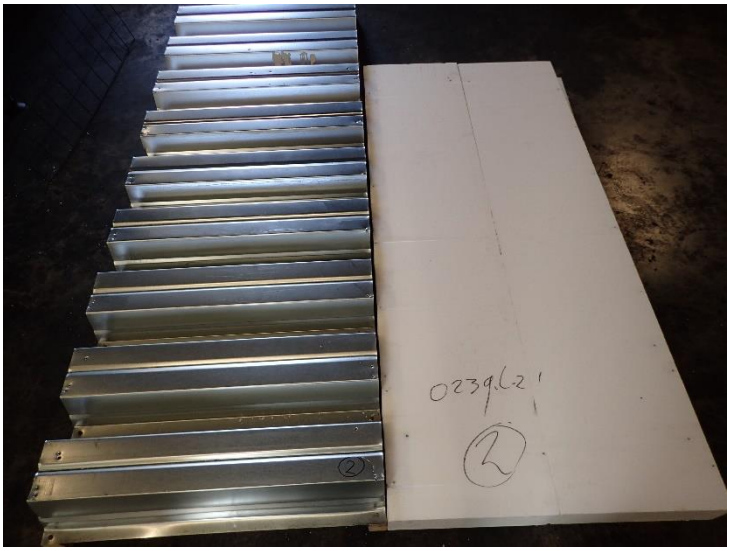

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Photo 10
The burnt section of the roofing of test specimen 3.

Photo 11
The burnt section of the insulation of test specimen 3.

Photo 12
The burnt section of the supporting deck of test specimen 3.

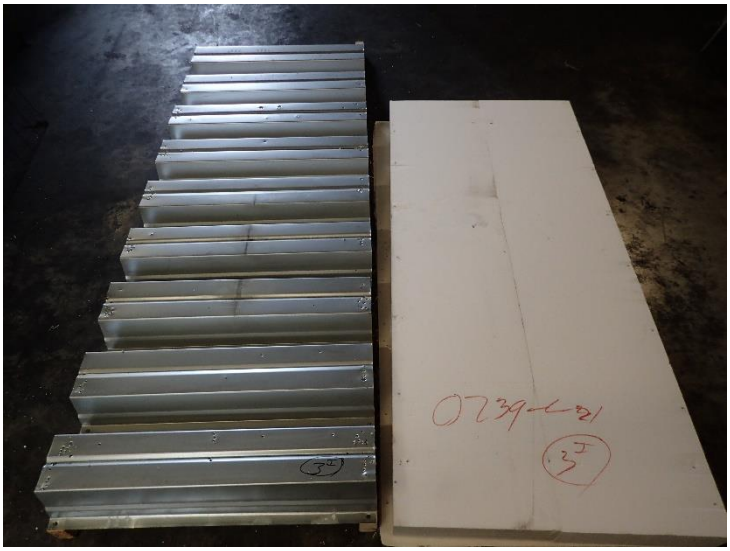

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Photo 13
The burnt section of the roofing of test specimen 4.

Photo 14
The burnt section of the insulation of test specimen 4.

Photo 15
The burnt section of the supporting deck of test specimen 4.

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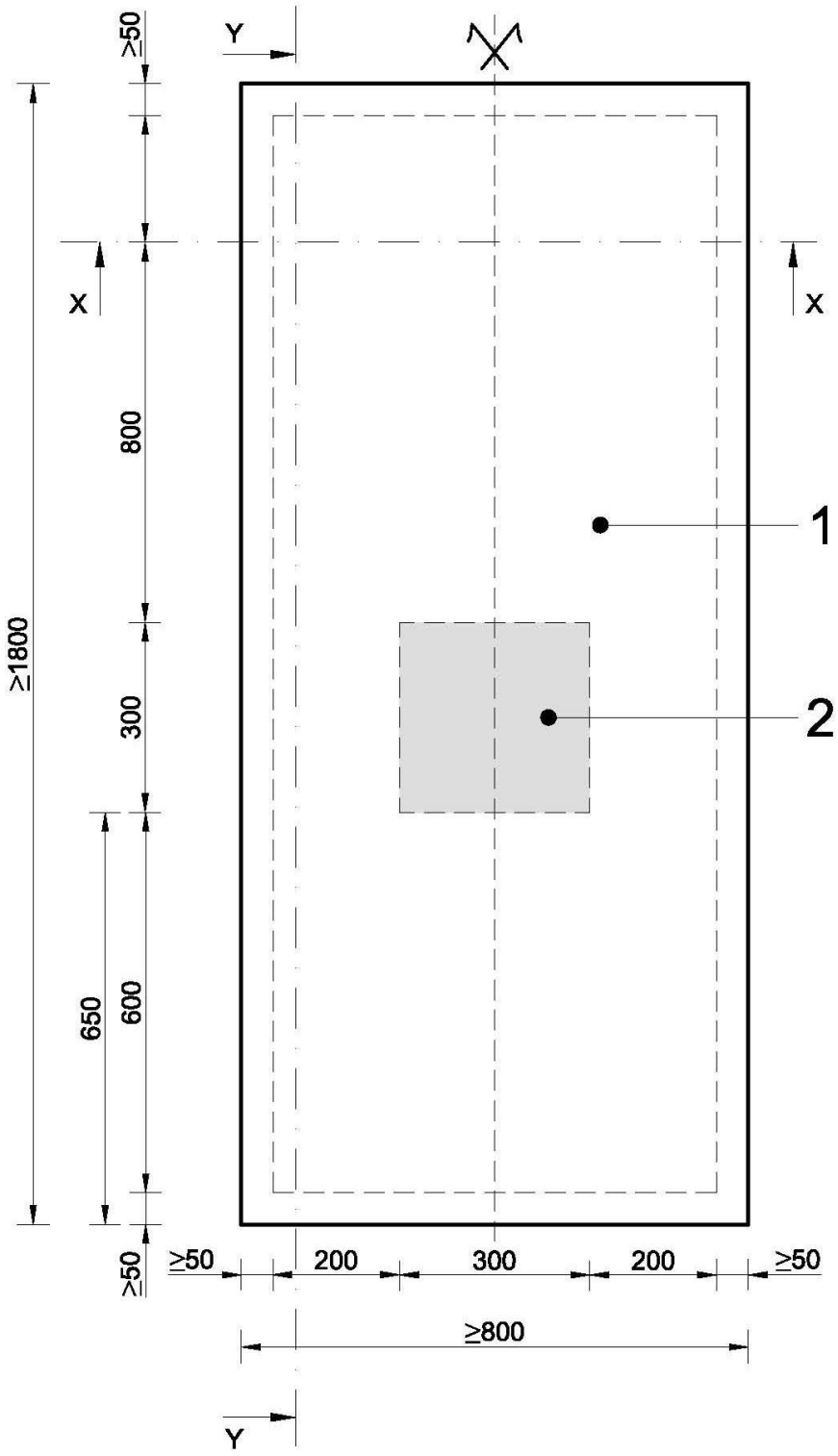
II Measuring zone and position of the brand

Dimensions in millimetres



1 Measuring zone
2 Basket filled with wood wool

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III Uncertainty of measurement

CEN/TS 1187, T1

Measurement equipment	Kiwa ID	Measurement uncertainty
Measuring tape	3027	(5000 ± 0,23) mm
Balance	2034B	(400 ± 0,056) g
Timing device	1008	(1 ± 0,24) s.(24 h)$^{-1}$
Inclinometer	1087	15,00 ± 0,21
Vane-wheel anemometer	1012F	(4,01 ± 0,068) m.s^{-1}
Thermohygrometer (temperature)	1099	(25 ± 0,321) °C
Thermohygrometer (humidity)	1099	(70 ± 1,489) % RH

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IV Photos of the products and further package data

AllShield® Blue 2C coating

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Production date: 07-06-2021
Production ID: 2106001
Allshield Blue 2C 30%
Two-component coating
Component B
Mixing ratio:
1:1 (A:B)
Weight: 25kg

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AllShield®
naturally covered

MATERIAL SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Product name:	**Allshield Blue**
Product description:	Ceramic coating
Product type:	Dispersions, two component

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses
Industrial uses: Uses of substances as such or in preparations* at industrial sites Consumer uses: Private households (= general public = consumers) Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Uses advised against	Reason
None identified.	-

1.3 Details of the supplier of the safety data sheet E-mail

AllShield BV
Westvlietweg 68T
2495AA
The Hague
The Netherlands
Phone: +31 85 489 9950
Mobile: +31 65 374 2830

E-mail address of person responsible for this MSDS; kl@allshieldcoatings.com; rd@allshieldcoatings.com

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SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : **Mixture**

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
Skin Irrit. 2, H315
Eye Irrit. 2, H319
STOT SE 3, H335

Classification according to Directive 1999/45/EC [DPD]
The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : Xi; R36/37/38

Human health hazards: Irritating to eyes, respiratory system and skin.
See Section 16 for the full text of the R phrases of H statements declared above.
See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms :	
Signal word:	No signal word.
Hazard statements:	Causes serious eye irritation. May cause skin irritation. May cause respiratory irritation.

Precautionary statements:

General:	Keep out of reach of children. Read label before use. If medical advice is needed, have product container or label at hand.
Prevention:	Use only outdoors or in a well-ventilated area.
Response:	IF ON SKIN: Wash with plenty of soap and water. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention.
Storage:	Store locked up.
Disposal:	Dispose of contents and container in accordance with all local, regional, national and international regulations.
Supplemental label elements:	Not applicable

Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Special packaging requirements:

Containers to be fitted with child-resistant fastenings:	Not applicable
Tactile warning of danger:	Not applicable

2.3 Other hazards:

Other hazards which do not result in classification:	Fine dust clouds may form explosive mixtures with air. Handling and/or processing of this material may generate a dust which can cause mechanical irritation of the eyes, skin, nose and throat.

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SECTION 3: Composition/information on ingredients

Substance / mixture

Product/ingredient name	Identifiers	%	Classification: 67/548/EEC	Classification: Regulation(EC) No.1272/2008[CLP]	Type
Magnesium oxide	EC:215-171-9 CAS: 1309-48-4	< 25	Xi; R36/37/38	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

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SECTION 4: First aid measures

4.1 Description of first aid measures

General:	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
Eye contact:	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
Inhalation:	Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiratory or oxygen by trained personnel.
Skin contact:	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion:	if swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
Protection of first-aiders:	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. See Section 2 and 3 for details.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.
If splashed in the eyes, the liquid may cause irritation and reversible damage.
Ingestion may cause nausea, diarrhea and vomiting.
This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure be oral, inhalation and dermal routes of exposure and eye contact.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician:	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments:	No specific treatment.

See toxicological information (Section 11)

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SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:	Recommended: alcohol-resistant foam, CO_2, powders, water spray.
Unsuitable extinguishing media :	Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture:	Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
Hazardous thermal decomposition products:	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

Special protective actions for fire-fighters:	Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
Special protective equipment for fire-fighters:	Appropriate breathing apparatus may be required.
Additional information:	No unusual hazard if involved in a fire.

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SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:	Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
For emergency responders:	If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also Section 8 for additional on hygiene measures.
6.2 Environmental precautions:	Do not allow to enter drains or watercourses. If the products contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.
6.3 Methods and material for containment and cleaning up:	Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13) Preferably clean with a detergent. Avoid using solvents.
6.4 Reference to other sections:	See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

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SECTION 7: Handling and storage

7.1 Precautions for safe handling:	Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Put on appropriate personal protective equipment (see Section 8). Never use pressure to empty. Container is not a pressure vessel. Always keep in containers made from the same material as the original one. Comply with the health and safety at work laws. Do not allow to enter drains or watercourses.
7.2 Conditions for safe storage, including any incompatibilities:	Store in accordance with local regulations. **Notes on joint storage.** Keep away from: oxidizing agents, strong alkalis , strong acids. **Additional information on storage conditions** Observe label precautions. Store in dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorized access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.
7.3 Specific end use(s) Recommendations:	Not available.
Industrial sector specific solutions:	Not available.

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
Magnesium oxide	**EH40/2005 WELs(United kingdom (UK), 12/2011).** TWA: 10 mg/m³, (as Mg) 8 hours. From: inhalable dust TWA: 4 mg/m³, (as Mg) 8 hours. From: respirable dust and fume

Recommended monitoring Procedures: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs: No DNELs/DMELs available

PNECs: No PNECs available

8.2 Exposure controls

Appropriate engineering controls: Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

Individual safety measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety glasses with side shields. (EN166)

Skin protection
Hand protection:
There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

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The breakthrough time must be greater than the end use time of the products.
The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.
Gloves should be replaced regularly and if there is any sign of damage to the glove material.
Always ensure that gloves are free from defects and that they are stored and used correctly.
The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.
Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

,Gloves :	For prolonged or repeated handling, use the following type of gloves: Recommended: >8 hours (breakthrough time): nitrile rubber The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN 374-3 : 2003 The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.
Body protection:	Wear overalls or long sleeved shirt. (EN467)
Other skin protection:	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection:	If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Recommended: disposable particulate mask (P2) (EN 143)
Environmental exposure controls:	Do not allow to enter drains or watercourses.

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SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance

Physical state:	Solid. [Crystalline powder]
Colour:	White
Odour:	Not available.
PH:	Not available.
Melting point/freezing point:	Not available.
Initial boiling point and boiling range:	Not available.
Flash point:	Not applicable
Evaporation rate:	Not available.
Flammability (solid, gas):	Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and shocks and mechanical impacts.
Burning time:	Not available.
Burning rate:	Not available.
Upper/lower flammability or explosive limits:	Not available.
	Not available.
Vapour pressure:	Not available.
Vapour density :	Not available.
Relative density :	1.5 to 1.7
Solubility(ies) :	Very slightly solube in the following materials: cold water and hot water.
Solubility in water:	Not available.
Partition coefficient: n-octanol/water:	Not available.
Auto-ignition temperature:	Not available.
Decomposition temperature:	Not available.
Viscosity:	Not available.
Explosive properties:	Non-explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and mechanical impacts.
Oxidising properties:	Not available.

No additional information.

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SECTION 10: Stability and reactivity

10.1 Reactivity:	No specific test data related to reactivity available for this product or its ingredients
10.2 Chemical stability:	Stable under recommended storage and handling conditions (see Section 7)
10.3 Possibility of hazardous reactions:	Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid:	When exposed to high temperatures may produce hazardous decomposition products.
10.5 Incompatible materials:	Keep away from following materials to prevent strong exothermic reactions: oxidizing agents, strong alkalis, strong acids.
10.6 Hazardous decomposition products:	Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO_2 and smoke can be generated.

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SECTION 11: Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself. See Section 2 and 3 for details.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.
If splashed in the eyes, the liquid may cause irritation and reversible damage.
Ingestion may cause nausea, diarrhea and vomiting.
This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Acute toxicity
Conclusion/Summary: Based on available data, the classification criteria are not met.
Acute toxicity estimates: Not available.

Irritation/Corrosion:
Conclusion/Summary
Skin: Causes skin irritation.
Eyes: Causes serious eye irritation.
Respiratory: May cause respiratory irritation.

Sensitisation:
Conclusion/Summary
Skin: Based on available data, the classification criteria are not met.
Respiratory: Based on available data, the classification criteria are not met.

Mutagenicity:
Conclusion/Summary: Based on available data, the classification criteria are not met.

Carcinogenicity:
Conclusion/Summary: Based on available data, the classification criteria are not met.

Reproductive toxicity:
Conclusion/Summary: Based on available data, the classification criteria are not met.

Teratogenicity:
Conclusion/Summary: Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure): Not available.

Specific target organ toxicity (repeated exposure): Not available.

Aspiration hazard: Not available.

Other information: Not available.

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SECTION 12: Ecological information

12.1 Toxicity:	There are no data available on the mixture itself. Do not allow to enter drains or watercourses.
Conclusion/Summary:	Based on available data, the classification criteria are not met.

12.2 Persistence and degradability

Conclusion/Summary:	This products has not been tested for biodegradation. Based on available data, the classification criteria are not met.

12.3 Bioaccumulative potential: Not available.

12.4 Mobility in soil:

Soil/water partition coefficient (Koc):	Not available.
Mobility :	Non – volatile.

12.5 Results of PBTand vPvB assessment

PBT	Not applicable.
vPvB	Not applicable.

12.6 Other adverse effects: No known significant effects or critictal hazards.

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Methods of disposal: The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non- recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 91/689/EEC.

Disposal considerations: Do not allow to enter drains or watercourses.
Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.
For further information, contact your local waste authority.

European waste catalogue (EWC):

The European Waste Catalogue classification of this product, when disposed of as waste is:

Waste code	Waste note
10 13 14	Waste concrete and concrete sludge

Packaging:

Methods of disposal: The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Disposal consideration: Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Not emptied containers are hazardous waste.

Special precautions: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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SECTION 14: Transport information

	ADR/RID	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No.	No.	No.
Additional information	-	-	-

14.6 Special precautions for user:

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

CN code: 3214 90 00

EU regulation (EC) no. 1907/2006 (REACH)

Annex XIV – List of substances subject to authorization

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII – Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: Not applicable.

Other EU regulations

VOC for Ready-for-Use: Mixture: Not applicable.

Europe inventory: All components are listed or exempted.

National regulations

15.2 Chemical Safety Assessment: This product contains substances for which Chemical Safety Assessments are still required.

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SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms: ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = CLP-specific Hazard statement
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RRN = REACH Registration Number
vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008[CLP/GHS]

Classification	Justification
Skin Irrit.2, H315	Calculation method.
Eye Irrit.2, H319	Calculation method.
STOT SE 3, H335	Calculation method.

Full text of abbreviated H Statements:
H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Full text of classifications [CLP/GHS]:
Eye Irrit.2, H319 SERIOUS EYE DAMAGE/EYE IRRITATION-Category2
Skin Irrit.2, H315 SKIN CORROSION/IRRITATION-Category2
STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation]-Category3

Full text of abbreviated R Phrases:
R36/37/38-Irritating to eyes, respiratory system and skin.

Full text of classifications [DSD/DPD]:
Xi- Irritant

Date of printing: 06/02/2019

FOR PROFESSIONAL USE ONLY

IMPORTANT NOTE The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do
not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product.

Veiligheidskaart
ECOPRIM GRIP
Veiligheidskaart van: 04/02/2020 - revisie 3

RUBRIEK 1: Identificatie van de stof of het mengsel en van de vennootschap/onderneming

1.1. Productidentificatie

Identificatie van het preparaat:

Handelsnaam: ECOPRIM GRIP

Handelscode: 9015600

1.2. Relevant geïdentificeerd gebruik van de stof of het mengsel en ontraden gebruik

Aanbevolen gebruik: Watergedragen primer op basis van synthetische harsen

Afgeraden gebruik: Gegevens niet beschikbaar

1.3. Details betreffende de verstrekker van het veiligheidsinformatieblad

Leverancier: Mapei Nederland:

Oude Apeldoornseweg 37 K - 7333 NR Apeldoorn

Verantwoordelijke: sicurezza@mapei.it

1.4. Telefoonnummer voor noodgevallen

Nationaal Vergiftigingen Informatie Centrum

Tel. 030-274 8888 – dag en nacht bereikbaar

Internet (www.vergiftigingen.info)

Tel. Number: 0031 (0)85-0069200 - Fax Number: 0031 (0)85-0069299

RUBRIEK 2: Identificatie van de gevaren

2.1. Indeling van de stof of het mengsel

Verordening (EG) n. 1272/2008 (CLP)

0 Het product wordt in overeenstemming met het Reglement EG 1272/2008 (CLP) niet als gevaarlijk beschouwd.

Fysische-chemische effecten schadelijk voor de menselijke gezondheid en het milieu:

Geen ander risico

2.2. Etiketteringselementen

Het product wordt in overeenstemming met het Reglement EG 1272/2008 (CLP) niet als gevaarlijk beschouwd.

Bijzondere schikkingen:

EUH208 Bevat 1,2-benzisothiazool-3(2H)-on. Kan een allergische reactie veroorzaken

EUH208 Bevat mengsel van: 5-chloor-2-methyl-2H-isothiazool-3-on [EC no. 247-500-7] en 2-methyl-2H-isothiazool-3-on [EC no. 220-239-6] (3:1). Kan een allergische reactie veroorzaken

EUH210 Veiligheidsinformatieblad op verzoek verkrijgbaar

Bijzondere bepalingen overeenkomstig bijlage XVII van REACH en latere wijzigingen:

None

2.3. Andere gevaren

Er zijn geen PBT/vPvB componenten.

Andere risico's: Geen ander risico

Dit product bevat kristallijn silica (kwartszand). IARC heeft kristallijn silica geclassificeerd als een carcinogeen van groep 1. Zowel IARC als NTP beschouwen silica als een bekend carcinogeen voor mensen. Bewijs is gebaseerd op de chronische en langdurige blootstelling van werknemers die kristallijne silica stofdeeltjes van inadembare afmetingen hebben moeten hebben. Omdat dit product in vloeibare of pastavorm is, vormt het geen stofgevaar; daarom is deze classificatie niet relevant. (Opmerking: schuren van het geharde product kan gevaar voor silicastof veroorzaken)

RUBRIEK 3: Samenstelling en informatie over de bestanddelen

3.1. Stoffen

N.A.

3.2. Mengsels

Identificatie van het preparaat: ECOPRIM GRIP

Gevaarlijke stoffen volgens de CLP-verordening en desbetreffende indeling:

Hoeveelheid	Naam	Ident. nr.	Classificatie	Registratienummer

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≥25 - <50 %	kwartszand (Ø > 10 µ)	CAS:14808-60-7 EC:238-878-4	
≥0.025 - <0.05 %	1,2-benzisothiazool-3(2H)-on	CAS:2634-33-5 EC:220-120-9 Index:613-088-00-6	Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Acute 1, H400; Acute Tox. 4, H302; Skin Sens. 1, H317; Aquatic Chronic 2, H411
<0.0015 %	mengsel van: 5-chloor-2-methyl-2H-isothiazool-3-on [EC no. 247-500-7] en 2-methyl-2H-isothiazool-3-on [EC no. 220-239-6] (3:1)	CAS:55965-84-9 EC:611-341-5 Index:613-167-00-5	Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 3, H301; Skin Corr. 1C, H314; Skin Sens. 1A, H317; Acute Tox. 2, H310; Acute Tox. 2, H330; Eye Dam. 1, H318, M-Chronic:100, M-Acute:100

RUBRIEK 4: Eerstehulpmaatregelen

4.1. Beschrijving van de eerstehulpmaatregelen

In geval van contact met de huid:

Met veel water en zeep wassen.

In geval van contact met de ogen:

Onmiddellijk wassen met water.

In geval van inslikken:

Geen braken opwekken, maar medische hulp zoeken en de SDS en gevaarlabel laten zien.

In geval van inademen:

Breng de gewonde naar buiten in de open lucht en houd hem/haar warm en in rust.

4.2. Belangrijkste acute en uitgestelde symptomen en effecten

N.A.

4.3. Vermelding van de vereiste onmiddellijke medische verzorging en speciale behandeling

Behandeling: N.A.

(zie punt 4.1)

RUBRIEK 5: Brandbestrijdingsmaatregelen

5.1. Blusmiddelen

Geschikte blusmiddelen:

Water.

Kooldioxyde (CO_2)

Blusmiddelen die om veiligheidsredenen niet moeten worden gebruikt:

Geen enkele in het bijzonder.

5.2. Speciale gevaren die door de stof of het mengsel worden veroorzaakt

De gassen die worden geproduceerd door de explosie of de verbranding niet inademen.

5.3. Advies voor brandweerlieden

Geschikte ademhalingapparatuur gebruiken.

RUBRIEK 6: Maatregelen bij het accidenteel vrijkomen van de stof of het mengsel

6.1. Persoonlijke voorzorgsmaatregelen, beschermingsmiddelen en noodprocedures

De individuele beschermingsmiddelen dragen.

Verplaats de personen naar een veilige plek.

6.2. Milieuvoorzorgsmaatregelen

Verhinder het doordringen in de grond/ondergrond. Verhinder het afvloeien in het oppervlaktewater of in het riool.

Het gemorste product bedekken met zand of aarde.

6.3. Insluitings- en reinigingsmethoden en -materiaal

Geschikt materiaal voor het verzamelen: absorberend materiaal, organisch, zand

Bewaar het besmette spoelwater en verwijder dit.

6.4. Verwijzing naar andere rubrieken

Zie ook paragraaf 8 en 13

RUBRIEK 7: Hantering en opslag

7.1. Voorzorgsmaatregelen voor het veilig hanteren van de stof of het mengsel

Vermijd contact met huid en ogen, inademing van dampen en nevel.

Tijdens het werk niet eten of drinken.

Verwezen wordt ook naar paragraaf 8 voor de aanbevolen beschermingsvoorzieningen.

7.2. Voorwaarden voor een veilige opslag, met inbegrip van incompatibele producten

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Uit de buurt houden van voedsel, drank en voeder.

Niet samengaande stoffen:

Geen enkele in het bijzonder.

Aanwijzingen voor de ruimten:

Goed geluchte ruimten.

7.3. Specifiek eindgebruik

Aanbeveling(en)

Geen enkel bijzonder gebruik

Specifieke oplossingen voor de industriesector:

Geen enkel bijzonder gebruik

RUBRIEK 8: Maatregelen ter beheersing van blootstelling/persoonlijke bescherming

8.1. Controleparameters

Lijst van bestanddelen met OEL waarde

Bestanddeel	OEL-type	land	Maximum	Lange termijn mg/m3	Lange termijn ppm	Korte termijn mg/m3	Korte termijn ppm	Gedrag	Opmerkinge
kwartszand (Ø > 10 µ)	NDS	POLAND		0,300					frakcja respirabilna
	National	DENMARK		0,3					DENMARK, inhalable aerosol inhalable aerosol
	National	DENMARK		0,100					DENMARK, respirable aerosol respirable aerosol
	SUVA	GERMANY		0,150					50 µg/m³ (Partikel Durchmesser < 12 µm) - TRGS 906
	National	SWITZERLAND		0,15					A
	ACGIH	NNN		0,025					(R), A2 - Pulm fibrosis, lung cancer
	National	NORWAY		0,300					K 7

8.2. Maatregelen ter beheersing van blootstelling

Bescherming van de ogen:

Niet vereist voor normaal gebruik. Ga hoe dan ook te werk volgens de juiste arbeidsgewoonten.

Bescherming van de huid:

Er is geen enkele speciale voorzorgsmaatregel vereist voor normaal gebruik.

Bescherming van de handen:

Geschikte materialen voor veiligheidshandschoenen; EN 374: Polychloropreen - CR: dikte> = 0,5 mm; doorbraaktijd> = 480min. Nitrilrubber - NBR: dikte> = 0,35mm; doorbraaktijd> = 480min. Butylrubber - IIR: dikte> = 0,5 mm; doorbraaktijd> = 480min. Fluorrubber - FKM: dikte> = 0,4 mm; doorbraaktijd> = 480min.

Bescherming van de luchtwegen:

Persoonlijke beschermingsmiddelen moeten voldoen aan de CE-normen (zoals EN 374 voor handschoenen en EN 166 voor veiligheidsbril), goed worden onderhouden en bewaard. De duur van het gebruik van persoonlijke beschermingsmiddelen en de bestendigheid tegen chemicaliën is afhankelijk van een aantal factoren (gebruik, klimatologische omstandigheden en opslagmethoden) die de levensduur van de EG-normen aanzienlijk kunnen verkorten. Raadpleeg altijd uw leverancier van persoonlijke beschermingsmiddelen. Train medewerkers om beveiligde spullen te gebruiken.

Hygiënische en technische maatregelen

N.A.

Passende technische maatregelen:

N.A.

RUBRIEK 9: Fysische en chemische eigenschappen

9.1. Informatie over fysische en chemische basiseigenschappen

Fysische staat: Vloeistof

Uitzicht en kleur: vloeibaar grijs

Geur: karakteristiek

Geurdrempel;: N.A.

pH: 8.50

Smelt/vriespunt: N.A.

Beginkookpunt en kookinterval: 100 °C (212 °F)

Ontvlambaarheidspunt: N.A.

Verdampingsnelheid: N.A.

Boven/onderlimiet van ontvlambaarheid of ontploffing: N.A.

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Densiteit dampen: N.A.
Dampdruk: N.A.
Relatieve densiteit: 1.50 g/cm3
Inwateroplosbaarheid: oplosbaar
Verdelingscoëfficiënt (n-octanol/water): N.A. - Dit product is een mengsel
Temperatuur van zelfontsteking: N.A. - Geen explosieve of spontane ontbranding bij contact met lucht op kamertemperatuur
Temperatuur van afbreken: N.A.
Viscositeit: N.A.
Explosieve eigenschappen: == - Geen componenten met explosieve eigenschappen
Verbrandingsbevorderende eigenschappen N.A. - Geen component met oxiderende eigenschappen
Vaste stoffen/gas ontvlambaarheid: N.A.

9.2. Overige informatie

Geen aanvullende informatie

RUBRIEK 10: Stabiliteit en reactiviteit

10.1. Reactiviteit

Stabiel in normale omstandigheden

10.2. Chemische stabiliteit

Stabiel in normale omstandigheden

10.3. Mogelijke gevaarlijke reacties

Geen.

10.4. Te vermijden omstandigheden

Stabiel onder normale omstandigheden.

10.5. Chemisch op elkaar inwerkende materialen

Geen enkele stof in het bijzonder.

10.6. Gevaarlijke ontledingsproducten

Geen.

RUBRIEK 11: Toxicologische informatie

11.1. Informatie over toxicologische effecten

Toxicologische informatie van het preparaat

Er zijn geen toxicologische gegevens van het preparaat voorhanden. Rekening houden met de concentratie van de verschillende stoffen zodat u de mate van vergiftiging tengevolge van blootstelling aan het preparaat kunt beoordelen.

Toxicologische informatie van de belangrijkste stoffen in het product

kwartszand (Ø > 10 µ)	a) acute toxiciteit	LD50 Oraal > 2000 mg/kg LD50 Huid > 2000 mg/kg
1,2-benzisothiazool-3(2H)-on	a) acute toxiciteit	LD50 Oraal Rat = 1020 mg/kg
mengsel van: 5-chloor-2-methyl-2H-isothiazool-3-on [EC no. 247-500-7] en 2-methyl-2H-isothiazool-3-on [EC no. 220-239-6] (3:1)	a) acute toxiciteit	LD50 Oraal Rat = 457 mg/kg LC50 Inademing Rat = 2,36 mg/l 4u LD50 Huid Konijn = 660 mg/kg LD50 Oraal Rat = 53 mg/kg

Indien niet anders gespecificeerd, moet de informatie die vereist wordt in Reglement (EU)2015/830 beschouwd worden als n.v.t.

a) acute toxiciteit
b) huidcorrosie/-irritatie
c) ernstig oogletsel/oogirritatie
d) sensibilisatie van de luchtwegen/de huid

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e) mutageniteit in geslachtscellen

f) kankerverwekkendheid

g) giftigheid voor de voortplanting;

h) STOT bij eenmalige blootstelling

Gif-opwekkings dynamiek, metabolisme en verdelingsinformatie

i) STOT bij herhaalde blootstelling

j) gevaar bij inademing

RUBRIEK 12: Ecologische informatie

12.1. Toxiciteit

Een normaal gebruik van het product maken en het product niet in het milieu lozen.

Ecotoxicologische informatie:

Lijst van bestanddelen met ecotoxicologische eigenschappen

Bestanddeel	Ident. nr.	Ecotox info
1,2-benzisothiazool-3(2H)-on	CAS: 2634-33-5 - EINECS: 220-120-9 - INDEX: 613-088-00-6	a) Acuut gevaar voor het aquatische milieu : LC50 Vissen = 2,15000 mg/l
		b) Chronisch gevaar voor het aquatische milieu : NOEC Algen = 0,04030 mg/l 72u
		b) Chronisch gevaar voor het aquatische milieu : EC50 Algen = 0,11000 mg/l 72u
mengsel van: 5-chloor-2-methyl-2H-isothiazool-3-on [EC no. 247-500-7] en 2-methyl-2H-isothiazool-3-on [EC no. 220-239-6] (3:1)	CAS: 55965-84-9 - EINECS: 611-341-5 - INDEX: 613-167-00-5	a) Acuut gevaar voor het aquatische milieu : EC50 Daphnia = 0,12 mg/l 48
		a) Acuut gevaar voor het aquatische milieu : LC50 Vissen = 0,22 mg/l 96
		a) Acuut gevaar voor het aquatische milieu : EC50 Algen = 0,048 mg/l 72
		b) Chronisch gevaar voor het aquatische milieu : NOEC Algen = 0,0012 mg/l 72
		b) Chronisch gevaar voor het aquatische milieu : NOEC Vissen = 0,098 mg/l - 28 d
		b) Chronisch gevaar voor het aquatische milieu : NOEC Daphnia = 0,004 mg/l - 21 d

12.2. Persistentie en afbreekbaarheid

N.A.

12.3. Bioaccumulatie

N.A.

12.4. Mobiliteit in de bodem

N.A.

12.5. Resultaten van PBT- en zPzB-beoordeling

Er zijn geen PBT/vPvB componenten.

12.6. Andere schadelijke effecten

N.A.

RUBRIEK 13: Instructies voor verwijdering

13.1. Afvalverwerkingsmethoden

Indien mogelijk hergebruiken. Handelen in overeenstemming met de geldende plaatselijke en nationale voorschriften.

Een afvalcode volgens de Europese afvalcatalogus (EAK) kan niet worden opgegeven vanwege afhankelijkheid van het gebruik. Neem contact op met een erkende afvalverwerkingsdienst.

Artikel:

Gooi afval niet in het riool.

Vijvers, waterwegen of sloten niet verontreinigen met chemicaliën of gebruikte containers.

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Stuur naar een erkende afvalverwerkingsdienst.
Verontreinigde verpakking:
Resterende inhoud leegmaken.
Gooi het weg als ongebruikt product.
Gebruik lege containers niet opnieuw.

RUBRIEK 14: Informatie met betrekking tot het vervoer

Ongevaarlijk goed met betrekking tot de vervoersvoorschriften.

14.1. VN-nummer

N.A.

14.2. Juiste ladingnaam overeenkomstig de modelreglementen van de VN

N.A.

14.3. Transportgevarenklasse(n)

N.A.

14.4. Verpakkingsgroep

N.A.

14.5. Milieugevaren

N.A.

14.6. Bijzondere voorzorgen voor de gebruiker

N.A.

Weg en Spoor (ADR-RID)

N.A.

ADR-Upper number: NA

Lucht (IATA):

N.A.

Zee (IMDG):

N.A.

14.7. Vervoer in bulk overeenkomstig bijlage II bij Marpol en de IBC-code

N.A.

RUBRIEK 15: Regelgeving

15.1. Specifieke veiligheids-, gezondheids- en milieureglementen en -wetgeving voor de stof of het mengsel

VOC (2004/42/EC) : N.A. g/l

Richtl. 98/24/EG (Risico's verbonden met chemicaliën op het werk)
Richtl. 2000/39/EG (Beroepsmatige blootstellingsgrenswaarden)
Verordening (EG) n. 1907/2006 (REACH)
Verordening (EU)2015/830
Verordening (EG) n. 1272/2008 (CLP)
Verordening (EG) n. 790/2009 (ATP 1 CLP) en (EU) n. 758/2013
Verordening (EU) n. 286/2011 (ATP 2 CLP)
Verordening (EU) n. 618/2012 (ATP 3 CLP)
Verordening (EU) n. 487/2013 (ATP 4 CLP)
Verordening (EU) n. 944/2013 (ATP 5 CLP)
Verordening (EU) n. 605/2014 (ATP 6 CLP)
Verordening (EU) n. 2015/1221 (ATP 7 CLP)
Verordening (EU) n. 2016/918 (ATP 8 CLP)
Verordening (EU) n. 2016/1179 (ATP 9 CLP)
Verordening (EU) n. 2017/776 (ATP 10 CLP)
Bepalingen met betrekking tot EU-richtlijn 2012/18 (Seveso III):

N.A.

Duitse Water Hazard Class.

N.A.

Beperkingen met betrekking tot het product of de stoffen erin overeenkomstig bijlage XVII van Verordening (EU) 1907/2006 (REACH) en de daarop volgende wijzigingen:

Beperkingen met betrekking tot het product: 40

Beperkingen met betrekking tot de stoffen die het bevat: None

SVHC stoffen:

Geen gegeven ter beschikking

MAL-kode: 1-3 (1993)

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15.2. Chemischeveiligheidsbeoordeling

Geen chemische veiligheidsbeoordeling is uitgevoerd voor het mengsel

RUBRIEK 16: Overige informatie

Dit document werd opgesteld door een bevoegd persoon inzake SDS die de juiste opleiding gevolgd heeft

Voornaamste bibliografische bronnen:

ECDIN - Gegevens- en informatienetwerk voor milieuchemicaliën - Gemeenschappelijk centrum voor onderzoek, Commissie van de Europese Gemeenschappen

SAX: GEVAARLIJKE EIGENSCHAPPEN VAN INDUSTRIËLE MATERIALEN - Achste editie - Van Nostrand Reinold

De hierin opgenomen informatie is gebaseerd op onze kennis op de bovenvermelde datum. Heeft uitsluitend betrekking op het aangegeven product en vormt geen speciale kwaliteitsgarantie.

De gebruiker is gehouden zich ervan te vergewissen of de informatie geschikt en compleet is met betrekking tot het specifieke gebruik dat de gebruiker ervan wil maken.

Deze kaart maakt elke voorgaande uitgave nietig en vervangt elke voorgaande uitgave.

Legenda van afkortingen en acroniemen die in het veiligheidsinformatieblad worden gebruikt:

ACGIH: American Conference of Governmental Industrial Hygienists (ACGIH)

ADR: Europese Overeenkomst betreffende het internationaal vervoer van gevaarlijke goederen over de weg.

AND: Europese overeenkomst betreffende het internationale vervoer van gevaarlijke goederen over de binnenwateren

ATE: Acute toxiciteitsschatting

ATEmengsel: Schatting van de acute toxiciteit (Mengsels)

BCF: Biologische concentratie factor

BEI: Biologische blootstelling Index

BOD: Biochemisch zuurstofverbruik

CAS: Chemical Abstracts Service (divisie van American Chemical Society).

CAV: Anti-vergiftigingscentrum

CE: Europese Gemeenschap

CLP: Classificatie, Etikettering, Verpakking

CMR: Carcinogeen, mutageen en reprotoxisch

COD: Chemisch zuurstofverbruik

COV: Vluchtige organische stoffen

CSA: Chemische veiligheidsbeoordeling

CSR: Chemisch veiligheidsverslag

DMEL: Afgeleide minimaal effect niveau

DNEL: Afgeleide dosis zonder effect.

DPD: Gevaarlijke preparaten richtlijn

DSD: Gevaarlijke stoffen richtlijn

EC50: Half maximale effectieve concentratie

ECHA: Europees Agentschap voor chemische stoffen

EINECS: Europese inventarisatie van bestaande commerciële chemische stoffen.

ES: Blootstellingsscenario

GefStoffVO: Verordening Gevaarlijke Stoffen, Duitsland

GHS: Wereldwijd geharmoniseerd systeem voor de indeling en etikettering van chemicaliën.

IARC: Internationaal Agentschap voor Kankeronderzoek

IATA: Vereniging voor internationaal luchtvervoer.

IATA-DGR: Dangerous Goods Regulation van de "International Air Transport Association" (IATA).

IC50: half-maximale remmende concentratie

ICAO: Internationale Burgerluchtvaartorganisatie.

ICAO-TI: Technische Instructies van de "International Civil Aviation Organization" (ICAO).

IMDG: Internationale Maritieme Code voor Gevaarlijke goederen.

INCI: Internationale Nomenclatuur van Cosmetische Ingrediënten.

IRCCS: Wetenschappelijk instituut voor onderzoek, ziekenhuisopname en gezondheidszorg

KSt: Explosie-coëfficiënt

LC50: Letale concentratie, voor 50 procent van de testpopulatie.

LD50: Letale dosis, voor 50 procent van de testpopulatie.

LDLo: Letale dosis laag

N.A.: Niet van toepassing

N/A: Niet van toepassing

N/D: Niet bepaald/Niet beschikbaar

NA: Niet beschikbaar

NIOSH: National Institute for Occupational Safety and Health

NOAEL: Geen waargenomen schadelijk effect niveau

OSHA: Occupational Safety and Health Administration (VS).

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PBT: Persistent, bioaccumulerend en toxisch
PGK: Verpakkingsinstructie
PNEC: Voorspelde nuleffectconcentratie.
PSG: Passagiers
RID: Reglement betreffende het internationaal vervoer van gevaarlijke goederen per spoor.
STEL: Korte termijn blootstellingslimiet
STOT: Specifieke doelorgaantoxiciteit
TLV: Maximaal Aanvaarde Concentratie
TWATLV: Maximaal Aanvaarde Concentratie voor de tijdgewogen gemiddelde 8-urige werkdag (ACGIH Standaard).
vPvB: Zeer persistent, zeer bioaccumulerend.
WGK: Duitse Water Hazard Class.

Paragrafen gewijzigd na vorige revisie:

- 3. SAMENSTELLING/INFORMATIE OVER DE BESTANDDELEN
- 5. BRANDBESTRIJDINGSMAATREGELEN
- 8. PERSOONLIJKE BESCHERMING/CONTROLE VAN DE BLOOTSTELLING
- 12. MILIEU-INFORMATIE

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EKLTM 800/450 reinforcement

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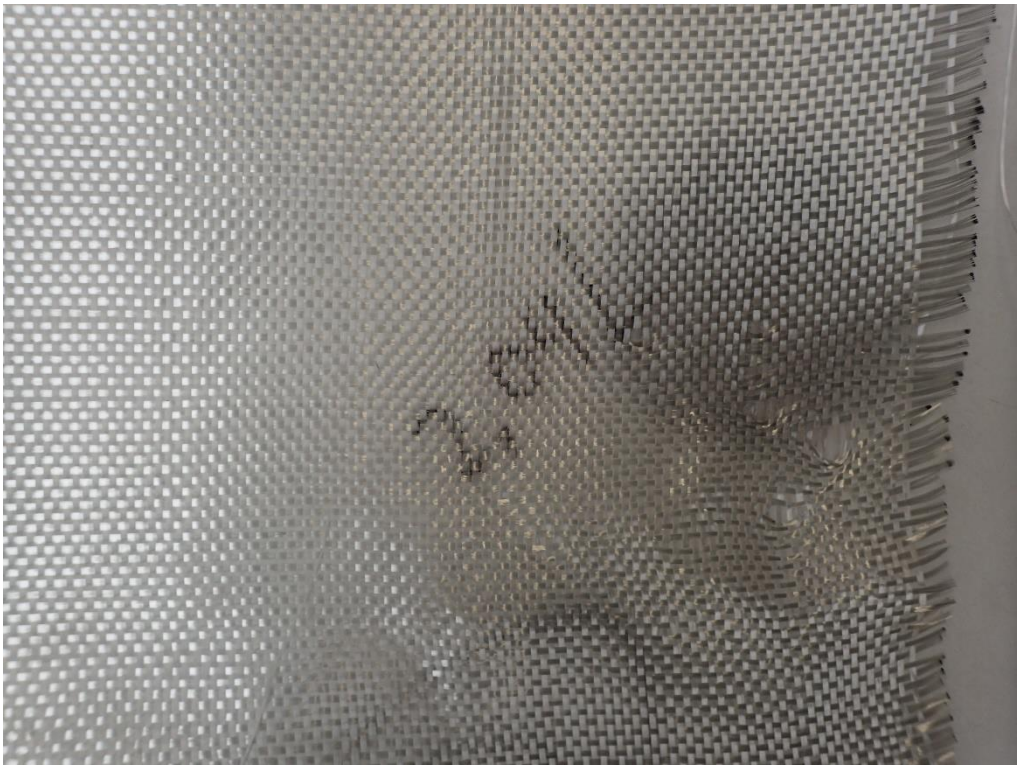

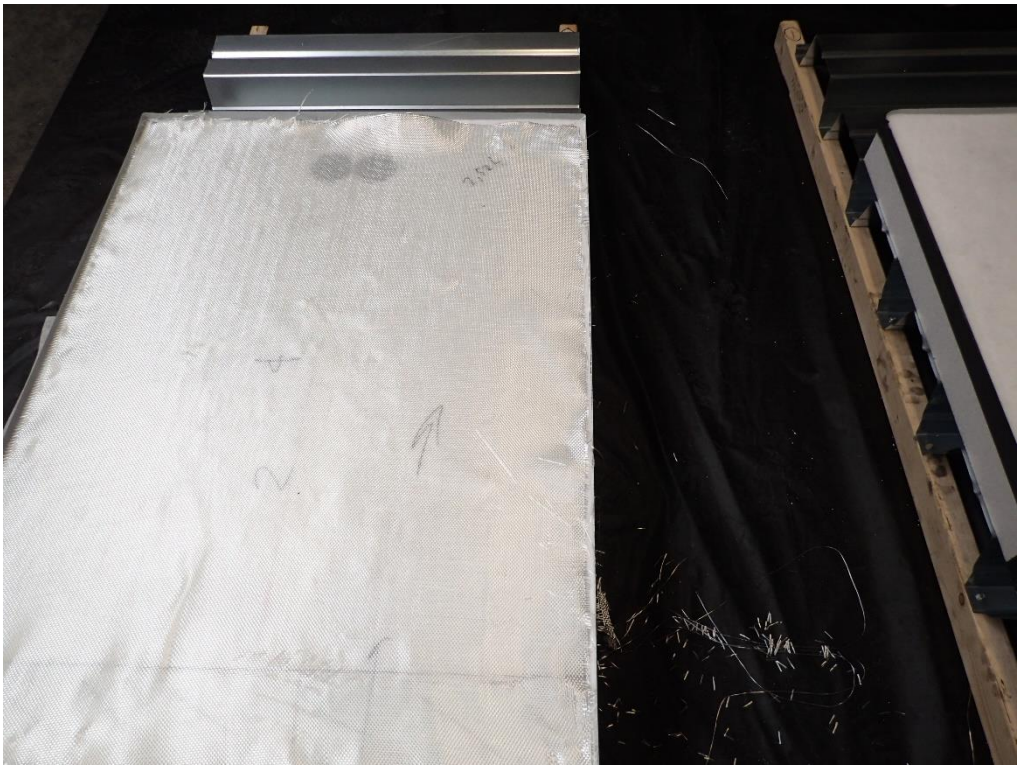

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常州普泰玻纤制品有限公司
PRO-TECH

Biaxial Fabrics (0°/90°) 双轴向缝编织物

It is a stitch-bonded composite reinforcement combining continuous roving oriented in the 0, 90, directions into a single fabric. It can be with mat or without mat It is ideal for applications such as wind blades, marine panel, snowboards, truck and trailer panels.....
双轴向缝编复合毡是由无捻粗纱 0°/90° 方向排列后，线圈结构编织而成的，
可根据用途选择带毡或不带毡。主要应用于风叶、造船业、汽车业、体育用品。

Products Property: 产品特点

不含粘结剂，适合多种树脂体系	No any Binder, good compatible with Multi-Resin
具有良好的力学性能	Optimal mechanical performance
操作工艺简单，成本低	Easy workability and low cost

Typical Type: 常用规格

牌号 Product No.	总克重 (g/m²) Overall Density	0°层 (g/m²) 0° Roving Density	90°层 (g/m²) 90° Roving Density	短切原丝层 (g/m²) Chop Density	缝合线 (g/m²) Polyester Yarn Density
EKLT400	409.5	202	198	/	9.5
EKLT600	609.5	330	270	/	9.5
EKLT800	809.5	412.5	387.5	/	9.5
EKLT1200	1209.5	605	595	/	9.5
EKLTM400/200	609.5	202	198	200	9.5
EKLTM600/300	909.5	330	270	300	9.5
EKLTM600/450	1059.5	330	270	450	9.5
EKLTM800/250	1059.5	412.5	387.5	250	9.5
EKLTM800/300	1109.5	412.5	387.5	300	9.5
EKLTM800/450	1259.5	412.5	387.5	450	9.5
EKLTM1608	835.5	275	276	275	9.5
EKLTM1808	894.5	330	280	275	9.5
EKLTM2408	1092	412.5	395	275	9.5
EKLTM2415	1274.7	412.5	395	457.7	9.5
EKLTM3208	1381.5	605	492	275	9.5

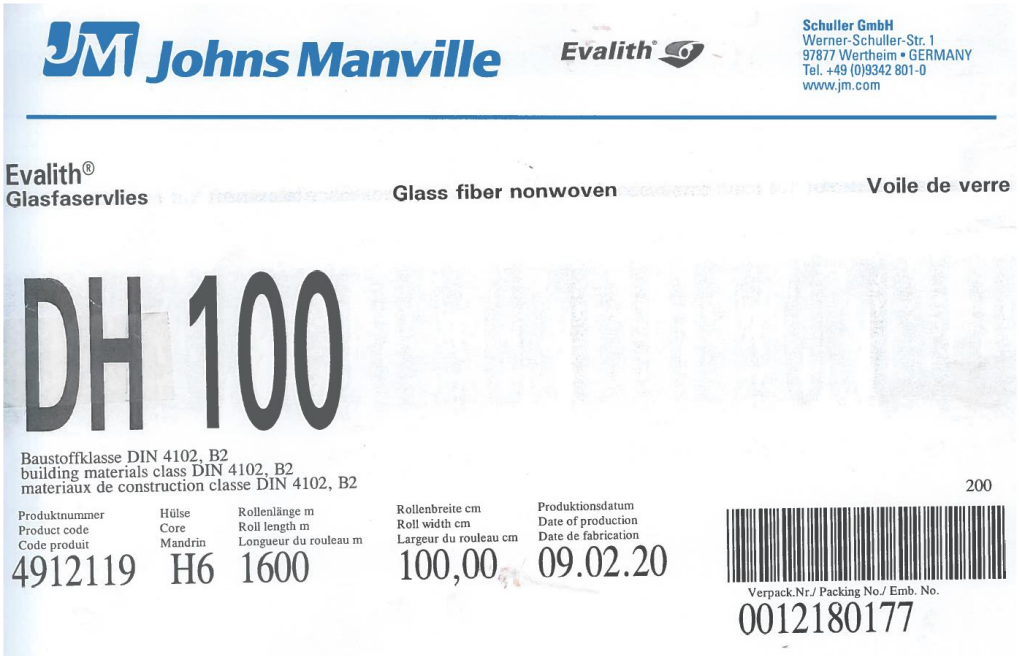
Remarks:

Standard width: 120cm, 125cm, Max.width 260cm. Min.width 10cm
Standard Roll weight: 55 or 60kg

Packaging:

Each roll is wound on paper tube (3"Dia.) with plastic film and packed in individual cardboard box.
16 or 12 cartons per Pallet.

Separation layer



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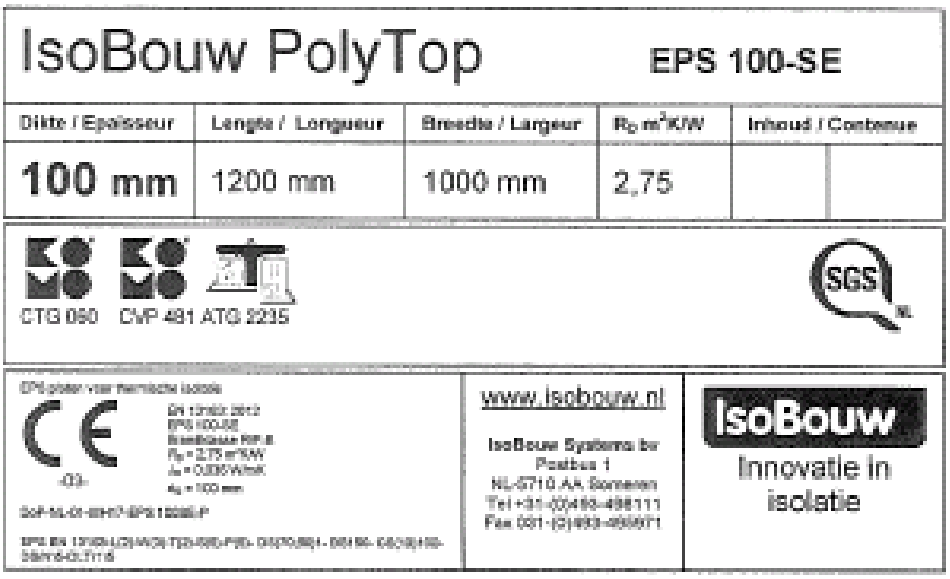
Thermal insulation



IsoBouw PolyTop			EPS 100-SE		
Dikte / Epaisseur	Lengte / Longueur	Breedte / Largeur	R_D m²K/W	Inhoud / Contenue	
100 mm	1200 mm	1000 mm	2,75		

CTG 050 CVP 491 ATG 2235

www.isobouw.nl

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NL-5710 AA Someren
Tel +31-(0)493-498111
Fax 031-(0)493-495971

IsoBouw
Innovatie in isolatie

De gegevens voor de standaarddikte van een vlakke plaat zijn hierboven vermeld, voor andere dikten en afschot: zie tabel hieronder.

Vlak		Afschot 1 %		Afschot 1,5 %		Afschot 2 %	
d	R_D	d	R_D gem	d	R_D gem	d	R_D gem
(mm)	(m²K/W)	(mm)	(m²K/W)	(mm)	(m²K/W)	(mm)	(m²K/W)
40	1,10	30-40	0,95	30-45	1,00	40-60	1,35
50	1,35	40-50	1,25	45-60	1,45	60-80	1,90
60	1,65	50-60	1,50	60-75	1,85	80-100	2,50
70	1,90	60-70	1,80	75-90	2,25	100-120	3,05
80	2,20	70-80	2,05	90-105	2,70	120-140	3,60
90	2,50	80-90	2,35	105-120	3,10	140-160	4,15
100	2,75	90-100	2,60	120-135	3,50	160-180	4,70
110	3,05	100-110	2,90	135-150	3,95	180-200	5,25
120	3,30	110-120	3,15	150-165	4,35		
130	3,60	120-130	3,45	165-180	4,75		
140	3,85	130-140	3,75	180-195	5,20		
150	4,15	140-150	4,00				
160	4,40	150-160	4,30				
170	4,70	160-170	4,55				
180	5,00	170-180	4,85				
190	5,25	180-190	5,10				
200	5,55	190-200	5,40				

Cacheerlaag:

- : Geen cacheerlaag
Flex : Mineraal gecoat polyester glasvlies
1000 : Gebitumineerd glasvlies, herkenbaar aan witte band met IsoBouw logo (aan de bovenzijde van de plaat)
2400 : Gebitumineerd glasvlies
2800 : Gebitumineerd glasvlies, herkenbaar aan wit polyestervlies (aan de onderzijde van de overlap)

Afschot:

Als er afschot in de platen zit, zijn de maten met inkjet op de platen aangegeven

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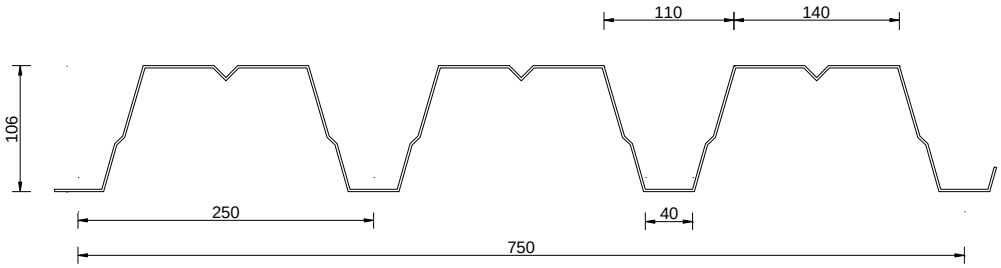
Supporting deck

Trapezoidal steel deck, VD 106R/750 (dimensions in mm)



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