

Awarding of licence for the use of EMICODE

Licence Number: 3886/01.10.05
For the product Planitop Fast 330
Of company Mapei
Due to application date August 27, 2012

With reference to the classification in accordance with the directives as stipulated in § 10 of the GEV trademark constitution

on behalf of the GEV for the above mentioned product as per § 5, section 4 of the GEV trademark constitution is awarded the licence for the use of the GEV trademark



This product meets with the guidelines for the criteria of use listed reverse.
The company is ordinary member of the GEV.

OM 035 August 7, 2017
valid until August 7, 2022

The Secretary General
Association for the Control of Emissions from Products
for Flooring Installation, Adhesives and Building Materials (GEV)
Völklinger Straße 4 · D-40219 Düsseldorf

Requirement guidelines for the awarding of the EMICODE licence

The flooring installation material mentioned in the front side licence has to meet with the following criteria in accordance with the constitution and guidelines of the Technical Advisory Board of the GEV and others:

- The product meets all the legal requirements, especially the chemical law and its specifications.
- The product is solvent free due to occupational health. Only in case of a wood flooring coating it might contain low content of solvents.
- A safety data sheet (MSDS) according to local law in its respectively valid version is to be established for the product.
- Carcinogenic, mutagenic, reprotoxic substances as well as those substances under suspicion to cause such defects are not permitted to be used in the manufacturing of this product.
- The testing of the product is in accordance with the defined GEV test method. Afterwards the definition of VOC is conducted in a test chamber by using the Tenax thermodesorption procedures with GC/MS analysis.
- The classification into the EMICODE classes is performed according to the following listed and described criteria and TVOC concentration groups. For product labelling the matching EMICODE class is to be used.

GEV product matrix	EMICODE		
	EC 1 ^{PLUS}	EC 1	EC 2
	TVOC/TSVOC _{28d} in µg/m ³		
1. Liquid products			
1.1 Primers (floor and wall)			
1.2 Ready to use thin fixations and adhesives			
1.3 Damp proof primers or barrier primers			
1.4 Liquid sealants, pasty surface sealants			
2. Mineral products			
2.1 Cement and calcium sulphate based levelling compounds			
2.2 Cement based and other mineral tile mortars and joint fillers			
2.3 Waterproofing slurries			
2.4 Screeds and screed binding materials			
3. Pasty products with high content of organic binder	After 3 days	After 3 days	After 3 days
3.1 Pasty adhesives for floor coverings and parquet, ready-to-use adhesive for ceramic tiles, other adhesives	≤ 750 TVOC;	≤ 1000 TVOC;	≤ 3000 TVOC;
3.2 Pasty fixations for floor coverings	after 28 days	after 28 days	after 28 days
3.3 Levelling compounds (based on dispersion or reactive resin)	≤ 60 TVOC /	< 100 TVOC /	≤ 300 TVOC /
3.4 Powder based adhesives with high content of organic binder	≤ 40 TSVOC	≤ 50 TSVOC	≤ 100 TSVOC
4. Ready to use products which do not require chemical curing or physical drying			
4.1 Underlays			
4.2 Insulating underlays			
4.3 Self-adhesive tapes and underlays			
4.4 Installation boards, decoupling/insulation boards, wall panels			
5. Joint sealants, joint insulations, joint sealing tapes			
5.1 Joint sealants (based on dispersion or reactive resins), repair fillers			
5.2 Joint insulations, expanding foams			
5.3 Pre-compressed or foam plastic joint sealing tapes			
5.4 Sealing membranes, tapes, sleeves for small surfaces			
5.5 Sealing membranes for large surfaces			
6. Surface coating for wood floorings	≤ 100 Σ TVVOC, TVOC, TSVOC	≤ 150 Σ TVVOC, TVOC, TSVOC	≤ 450 Σ TVVOC, TVOC, TSVOC
6.1 Waterborne wood floor coatings	thereof max. 40 SVOC	thereof max. 50 SVOC	thereof max. 100 SVOC
6.2 Water-based joint filler for parquet			

**Gemeinschaft Emissionskontrollierte
Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.**

Association for the Control of Emissions from Products
for Flooring Installation, Adhesives and Building Materials

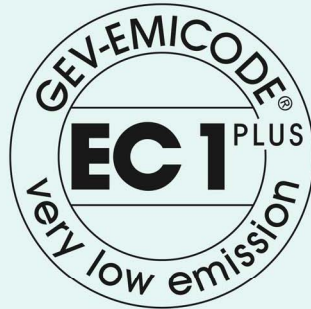


Awarding of licence for the use of EMICODE

Licence Number: 6072/01.10.05
For the product MAPECEM
Of company Mapei
Due to application date June 24, 2015

With reference to the classification in accordance with the directives as stipulated in § 10 of the GEV trademark constitution

on behalf of the GEV for the above mentioned product as per § 5, section 4 of the GEV trademark constitution is awarded the licence for the use of the GEV trademark



This product meets with the guidelines for the criteria of use listed reverse.
The company is ordinary member of the GEV.

OM 035 June 25, 2020
valid until June 25, 2025

A handwritten signature in blue ink, appearing to read 'D. J. ...'.

The Secretary General
Association for the Control of Emissions in Products
for Flooring Installation, Adhesives and Building Materials (GEV)
Völklinger Straße 4 · D-40219 Düsseldorf

Requirement guidelines for the awarding of the EMICODE licence

The product mentioned on the front side of the licence has to fulfil among others the following criteria in accordance with the Constitution and the guidelines of the Technical Advisory Board of the GEV:

- The product meets all the legal requirements, especially the chemical laws and their specifications.
- The product is solvent free as specified in clause 2.4 of the “GEV Classification Criteria”, except if it is a surface treatment product. If the product is assigned to a GISCODE product group then this can be labelled.
- A safety data sheet (SDS) according to local law in its respectively valid version is issued for the product.
- Carcinogenic, mutagenic, reprotoxic substances of the categories 1A or 1B are not added during the manufacture of the product.
- The testing of the product is performed in accordance with the GEV Testing Method. VOC determination is performed in a test chamber followed by the Tenax / thermal desorption procedures with subsequent GC/MS analysis.
- The assignment of an EMICODE class is performed according to the following criteria and TVOC/TSVOC concentration levels. The corresponding EMICODE class shall be used to label the product:

1) Installation products, adhesives and construction products

Parameter	EC 1 ^{PLUS}	EC 1	EC 2
	max. allowed concentration [$\mu\text{g}/\text{m}^3$]		
TVOC after 3 days	≤ 750	≤ 1000	≤ 3000
TVOC after 28 days	≤ 60	≤ 100	≤ 300
TSVOC after 28 days	≤ 40	≤ 50	≤ 100
R value based on German AgBB LCI (NIK) after 28 days	1	-	-
Sum of non-assessable VOC	≤ 40	-	-
Formaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Acetaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Sum of form- and acetaldehyde	≤ 0.05 ppm	≤ 0.05 ppm	≤ 0.05 ppm
Sum of volatile C1A/C1B after 3 days	≤ 10	≤ 10	≤ 10
Any volatile C1A/C1B after 28 days	≤ 1	≤ 1	≤ 1

2) Products for floor surface treatments for parquet, mineral floors and resilient floorings

Parameter	EC 1 ^{PLUS}	EC 1	EC 2
	max. allowed concentration [$\mu\text{g}/\text{m}^3$]		
Sum TVOC + TSVOC after 28 days	≤ 100 thereof max. 40 SVOC	≤ 150 thereof max. 50 SVOC	≤ 450 thereof max. 100 SVOC
Formaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Acetaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Any volatile C1A/C1B after 3 days	≤ 10	≤ 10	≤ 10
Any volatile C1A/C1B after 28 days	≤ 1	≤ 1	≤ 1

**Gemeinschaft Emissionskontrollierte
Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.**

Association for the Control of Emissions from Products
for Flooring Installation, Adhesives and Building Materials



Awarding of licence for the use of EMICODE

Licence Number:	3069/01.10.05
For the product	Mapecem Pronto
Of company	Mapei
Due to application date	April 8, 2011

With reference to the classification in accordance with the directives as stipulated in § 10 of the GEV trademark constitution

on behalf of the GEV for the above mentioned product as per § 5, section 4 of the GEV trademark constitution is awarded the licence for the use of the GEV trademark



This product meets with the guidelines for the criteria of use listed reverse.
The company is ordinary member of the GEV.

OM 035 October 22, 2019
valid until October 22, 2024

A handwritten signature in blue ink, appearing to read 'D. J. ...'.

The Secretary General
Association for the Control of Emissions in Products
for Flooring Installation, Adhesives and Building Materials (GEV)
Völklinger Straße 4 · D-40219 Düsseldorf

Requirement guidelines for the awarding of the EMICODE licence

The product mentioned on the front side of the licence has to fulfil among others the following criteria in accordance with the Constitution and the guidelines of the Technical Advisory Board of the GEV:

- The product meets all the legal requirements, especially the chemical laws and their specifications.
- The product is solvent free as specified in clause 2.4 of the “GEV Classification Criteria”, except if it is a surface treatment product. If the product is assigned to a GISCODE product group then this can be labelled.
- A safety data sheet (SDS) according to local law in its respectively valid version is issued for the product.
- Carcinogenic, mutagenic, reprotoxic substances of the categories 1A or 1B are not added during the manufacture of the product.
- The testing of the product is performed in accordance with the GEV Testing Method. VOC determination is performed in a test chamber followed by the Tenax / thermal desorption procedures with subsequent GC/MS analysis.
- The assignment of an EMICODE class is performed according to the following criteria and TVOC/TSVOC concentration levels. The corresponding EMICODE class shall be used to label the product:

1) Installation products, adhesives and construction products

Parameter	EC 1 ^{PLUS}	EC 1	EC 2
	max. allowed concentration [$\mu\text{g}/\text{m}^3$]		
TVOC after 3 days	≤ 750	≤ 1000	≤ 3000
TVOC after 28 days	≤ 60	≤ 100	≤ 300
TSVOC after 28 days	≤ 40	≤ 50	≤ 100
R value based on German AgBB LCI (NIK) after 28 days	1	-	-
Sum of non-assessable VOC	≤ 40	-	-
Formaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Acetaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Sum of form- and acetaldehyde	≤ 0.05 ppm	≤ 0.05 ppm	≤ 0.05 ppm
Sum of volatile C1A/C1B after 3 days	≤ 10	≤ 10	≤ 10
Any volatile C1A/C1B after 28 days	≤ 1	≤ 1	≤ 1

2) Products for floor surface treatments for parquet, mineral floors and resilient floorings

Parameter	EC 1 ^{PLUS}	EC 1	EC 2
	max. allowed concentration [$\mu\text{g}/\text{m}^3$]		
Sum TVOC + TSVOC after 28 days	≤ 100 thereof max. 40 SVOC	≤ 150 thereof max. 50 SVOC	≤ 450 thereof max. 100 SVOC
Formaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Acetaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Any volatile C1A/C1B after 3 days	≤ 10	≤ 10	≤ 10
Any volatile C1A/C1B after 28 days	≤ 1	≤ 1	≤ 1

**Gemeinschaft Emissionskontrollierte
Verlegewerkstoffe, Klebstoffe und Bauprodukte e.V.**

Association for the Control of Emissions from Products
for Flooring Installation, Adhesives and Building Materials

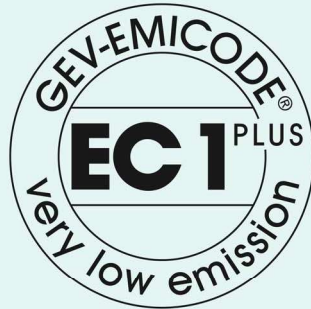


Awarding of licence for the use of EMICODE

Licence Number: 9937/01.10.05
For the product PRIMER 3296
Of company Mapei
Due to application date January 18, 2019

With reference to the classification in accordance with the directives as stipulated in § 10 of the GEV trademark constitution

on behalf of the GEV for the above mentioned product as per § 5, section 4 of the GEV trademark constitution is awarded the licence for the use of the GEV trademark



This product meets with the guidelines for the criteria of use listed reverse.
The company is ordinary member of the GEV.

OM 035 **January 18, 2019**
valid until January 18, 2024

A handwritten signature in blue ink, appearing to read 'D. J. ...'.

The Secretary General
Association for the Control of Emissions in Products
for Flooring Installation, Adhesives and Building Materials (GEV)
Völklinger Straße 4 · D-40219 Düsseldorf

Requirement guidelines for the awarding of the EMICODE licence

The product mentioned on the front side of the licence has to fulfil among others the following criteria in accordance with the Constitution and the guidelines of the Technical Advisory Board of the GEV:

- The product meets all the legal requirements, especially the chemical laws and their specifications.
- The product is solvent free as specified in clause 2.4 of the “GEV Classification Criteria”, except if it is a surface treatment product. If the product is assigned to a GISCODE product group then this can be labelled.
- A safety data sheet (SDS) according to local law in its respectively valid version is issued for the product.
- Carcinogenic, mutagenic, reprotoxic substances of the categories 1A or 1B are not added during the manufacture of the product.
- The testing of the product is performed in accordance with the GEV Testing Method. VOC determination is performed in a test chamber followed by the Tenax / thermal desorption procedures with subsequent GC/MS analysis.
- The assignment of an EMICODE class is performed according to the following criteria and TVOC/TSVOC concentration levels. The corresponding EMICODE class shall be used to label the product:

1) Installation products, adhesives and construction products

Parameter	EC 1 ^{PLUS}	EC 1	EC 2
	max. allowed concentration [$\mu\text{g}/\text{m}^3$]		
TVOC after 3 days	≤ 750	≤ 1000	≤ 3000
TVOC after 28 days	≤ 60	≤ 100	≤ 300
TSVOC after 28 days	≤ 40	≤ 50	≤ 100
R value based on German AgBB LCI (NIK) after 28 days	1	-	-
Sum of non-assessable VOC	≤ 40	-	-
Formaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Acetaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Sum of form- and acetaldehyde	≤ 0.05 ppm	≤ 0.05 ppm	≤ 0.05 ppm
Sum of volatile C1A/C1B after 3 days	≤ 10	≤ 10	≤ 10
Any volatile C1A/C1B after 28 days	≤ 1	≤ 1	≤ 1

2) Products for floor surface treatments for parquet, mineral floors and resilient floorings

Parameter	EC 1 ^{PLUS}	EC 1	EC 2
	max. allowed concentration [$\mu\text{g}/\text{m}^3$]		
Sum TVOC + TSVOC + TVOC after 28 days	≤ 100 thereof max. 40 SVOC	≤ 150 thereof max. 50 SVOC	≤ 450 thereof max. 100 SVOC
Formaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Acetaldehyde after 3 days	≤ 50	≤ 50	≤ 50
Any volatile C1A/C1B after 3 days	≤ 10	≤ 10	≤ 10
Any volatile C1A/C1B after 28 days	≤ 1	≤ 1	≤ 1

Awarding of licence for the use of EMICODE

Licence Number: 7758/01.10.05
For the product MAPELASTIC SMART
Of company Mapei
Due to application date January 27, 2017

With reference to the classification in accordance with the directives as stipulated in § 10 of the GEV trademark constitution

on behalf of the GEV for the above mentioned product as per § 5, section 4 of the GEV trademark constitution is awarded the licence for the use of the GEV trademark



This product meets with the guidelines for the criteria of use listed reverse.
The company is ordinary member of the GEV.

OM 035 **January 27, 2017**
valid until January 27, 2022

The Secretary General
Association for the Control of Emissions from Products
for Flooring Installation, Adhesives and Building Materials (GEV)
Völklinger Straße 4 · D-40219 Düsseldorf

Requirement guidelines for the awarding of the EMICODE licence

The flooring installation material mentioned in the front side licence has to meet with the following criteria in accordance with the constitution and guidelines of the Technical Advisory Board of the GEV and others:

- The product meets all the legal requirements, especially the chemical law and its specifications.
- The product is solvent free due to occupational health. Only in case of a wood flooring coating it might contain low content of solvents.
- A safety data sheet (MSDS) according to local law in its respectively valid version is to be established for the product.
- Carcinogenic, mutagenic, reprotoxic substances as well as those substances under suspicion to cause such defects are not permitted to be used in the manufacturing of this product.
- The testing of the product is in accordance with the defined GEV test method. Afterwards the definition of VOC is conducted in a test chamber by using the Tenax thermodesorption procedures with GC/MS analysis.
- The classification into the EMICODE classes is performed according to the following listed and described criteria and TVOC concentration groups. For product labelling the matching EMICODE class is to be used.

GEV product matrix	EMICODE		
	EC 1 PLUS	EC 1	EC 2
	TVOC/TSVOC _{28d} in µg/m ³		
1. Liquid products			
1.1 Primers (floor and wall)			
1.2 Ready to use thin fixations and adhesives			
1.3 Damp proof primers or barrier primers			
1.4 Liquid sealants, pasty surface sealants			
2. Mineral products			
2.1 Cement and calcium sulphate based levelling compounds			
2.2 Cement based and other mineral tile mortars and joint fillers			
2.3 Waterproofing slurries			
2.4 Screeds and screed binding materials			
3. Pasty products with high content of organic binder	After 3 days	After 3 days	After 3 days
3.1 Pasty adhesives for floor coverings and parquet, ready-to-use adhesive for ceramic tiles, other adhesives	≤ 750 TVOC;	≤ 1000 TVOC;	≤ 3000 TVOC;
3.2 Pasty fixations for floor coverings	after 28 days	after 28 days	after 28 days
3.3 Levelling compounds (based on dispersion or reactive resin)			
3.4 Powder based adhesives with high content of organic binder	≤ 60 TVOC /	< 100 TVOC /	≤ 300 TVOC /
4. Ready to use products which do not require chemical curing or physical drying	≤ 40 TSVOC	≤ 50 TSVOC	≤ 100 TSVOC
4.1 Underlays			
4.2 Insulating underlays			
4.3 Self-adhesive tapes and underlays			
4.4 Installation boards, decoupling/insulation boards, wall panels			
5. Joint sealants, joint insulations, joint sealing tapes			
5.1 Joint sealants (based on dispersion or reactive resins), repair fillers			
5.2 Joint insulations, expanding foams			
5.3 Pre-compressed or foam plastic joint sealing tapes			
5.4 Sealing membranes, tapes, sleeves for small surfaces			
5.5 Sealing membranes for large surfaces			
6. Surface coating for wood floorings			
6.1 Waterborne wood floor coatings	≤ 100 Σ TVVOC, TVOC, TSVOC thereof max. 40 SVOC	≤ 150 Σ TVVOC, TVOC, TSVOC thereof max. 50 SVOC	≤ 450 Σ TVVOC, TVOC, TSVOC thereof max. 100 SVOC
6.2 Water-based joint filler for parquet	After 3 days ≤ 750 TVOC; after 28 days ≤ 60 TVOC / ≤ 40 TSVOC	After 3 days ≤ 1000 TVOC; after 28 days < 100 TVOC / ≤ 50 TSVOC	After 3 days ≤ 3000 TVOC; after 28 days ≤ 300 TVOC / ≤ 100 TSVOC