## Sustainability data sheet

# DITRA-X1 | Premium adhesive for walls and floors

- C2 TE S1 to DIN EN 12004
- For installation of Schlüter®-DITRA and Schlüter®-KERDI product systems
- For laying tiles and natural stone units
- **High coverage**
- For walls and floors
- For indoor and outdoor use





#### **Emissions**

German AgBB test

**GEV EMICODE** EC1PLUS R

French VOC ordinance A+ very-low-emission

**VOC** content





Information sur le niveau d'émission de substances volatiles dans l'air intérieur, présentant un risque de toxicité par inhalation, sur une échelle de classe allant de A+ (très faibles émissions) à C (fortes émissions).

### **Building certification systems**

#### **DGNB** · German Quality Label for Sustainable Building

2015 version		
Criterion	ENV1.2 Local Environmental Impact	
Criteria matrix	Line 8	
Product type	Laying material – Adhesive below wall and floor coverings	
Requirements	Quality level 1 (low)	GISCODE D1/RU0,5/RU1/RE1/RS10
	Quality level 2	GISCODE D1/RU0,5/RU1/RE1/RS10 and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113
	Quality level 3	GISCODE D1/RU0,5/RU1/RE1/RS10 and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113
	Quality level 4 (high)	GISCODE D1/RU0,5/RU1/RE1/RS10 and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113
Rating	Meets quality level 4 requirements.	

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Schlüter-Systems KG

#### **Exceptions**

**Exceptions** 

**Exceptions** 

Exceptions to the requirements may be granted in cases where one of the specified product requirements cannot be met for technical or functional reasons (i.e. due to the absence of a functionally equivalent product or a design alternative meeting the requirements) or where the basic data cannot be prepared for a reasonable outlay. The deviation from the requirements shall be documented and justified, with details provided of the product, technical application and quantities used. Product exceptions for purely aesthetic reasons are excluded from this provision. Evidence may, for example, be provided by an up-to-date confirmation by at least three market-relevant manufacturers that no suitable product is available for the targeted quality level, or through proof that use of the suitable product was not technically feasible due to force majeure (weather conditions, natural factors such as hydrostatic pressure in subsoil). The evidence provided for a technical exception may only relate to a single quality level and allows no exemption from compliance with any requirements specified for the lower quality levels. Should it be impossible to comply with the requirement of a lower quality level, for technical reasons, this must be consistently indicated in all three submitted manufacturer confirmations relating to the technical exception.

2012 version (2013 upgra	de)	
Criterion	ENV1.2 Local Environmental Impact	
Criteria matrix	Line 7	
Product type	Laying material - Adhesive below wall and floor coverings	
Requirements	Quality level 1 (low)	GISCODE D1/RU0,5/RU1/RE1/RS10
	Quality level 2	GISCODE D1/RU0,5/RU1/RE1/RS10 and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113
	Quality level 3	GISCODE D1/RU0,5/RU1/RE1/RS10 and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113
	Quality level 4 (high)	GISCODE D1/RU0,5/RU1/RE1/RS10 and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113
Rating	Meets quality level 4 requirements.	

Exceptions to the requirements may be granted in cases where one of the specified product requirements cannot be met for technical or functional reasons (i.e. due to the absence of a functionally equivalent product or a design alternative meeting the requirements) or where the basic data cannot be prepared for a reasonable outlay. The deviation from the requirements shall be documented and justified, with details provided of the product, technical application and quantities used. Product exceptions for purely aesthetic reasons are excluded from this provision. Evidence may, for example, be provided by an up-to-date confirmation by at least two market-relevant manufacturers that no suitable product is available for the targeted quality level, or through proof that use of the suitable product was not technically feasible due to force majeure (weather conditions, natural factors such as hydrostatic pressure in subsoil). The evidence provided for a technical exception may only relate to a single quality level and allows no exemption from compliance with any requirements specified for the lower quality levels.

2009 version		
Profile	06 Local Environmental Impact	
Product type	Flooring adhesive – Product for surface coverings	
Requirements	Quality level 1 (low)	VOC content ≤ 25 %
	Quality level 2	VOC content ≤ 15% and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113
	Quality level 3	VOC content ≤ 10 % and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113
	Quality level 4 (high)	VOC content ≤ 3 % and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113
Rating	Meets quality level 4 requirements.	

Exceptions to the requirements may be granted in cases where one of the specified product requirements cannot be met for technical or functional reasons (i.e. due to the absence of a functionally equivalent product or a design alternative meeting the requirements) or where the basic data cannot be prepared for a reasonable outlay. The deviation from the requirements shall be documented and justified, with details provided of the product, technical application and quantities used. Product exceptions for purely aesthetic reasons are excluded from this provision.

2014 version (draft)			
Criterion	1.1.6 Local Environmental Impact		
Summary table	Line 10		
Product type	Laying material – Adhesive below wall coverings		
Requirements	Quality level 1 (low)	Documentation	
	Quality level 2	GISCODE D1/RU0,5/RU1/RE1/RS10	
	Quality level 3	GISCODE D1/RU0,5/RU1/RE1/RS10 and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113	
	Quality level 4	GISCODE D1/RU0,5/RU1/RE1/RS10 and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113	
	Quality level 5 (high)	GISCODE D1/RU0,5/RU1/RE1/RS10 and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS F or RAL-UZ 113	
Rating	Meets quality level 5 re	quirements.	
Summary table Product type	Line 10 a  Laying material – Adhesive below floor coverings		
Requirements	Quality level 1 (low)	Documentation	
	Quality level 2	EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R	
	Quality level 3	EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R	
	Quality level 4	EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R and RAL-UZ 113	
	Quality level 5 (high)	EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R and RAL-UZ 113	
Rating	Meets quality level 5 re	Meets quality level 5 requirements as EMICODE EC1PLUS R is better than RAL-UZ 113.	
Exceptions	Exceptions to the requirements may be granted in cases where one of the specified product requirements cannot be met for technical or functional reasons (i.e. due to the absence of a functionally equivalent product or a design alternation meeting the requirements) or where the basic data cannot be prepared for a reasonable outlay. The deviation from the requirements shall be documented and justified, with details provided of the product, technical application and quantitioused. Product exceptions for purely aesthetic reasons are excluded from this provision.		

2011 version		
Criterion	1.1.6 Local Environmental Impact	
Product type	Flooring adhesive – Product for surface coverings	
Requirements	Quality level 1 (low)	Documentation
	Quality level 2	VOC content ≤ 25 %
	Quality level 3	VOC content ≤ 15% and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113
	Quality level 4	VOC content ≤ 10% and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113
	Quality level 5 (high)	VOC content ≤ 3 % and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113
Rating	Meets quality level 5 requirements.	
Exceptions	Exceptions to the requirements may be granted in cases where one of the specified product requirements cannot be	

Exceptions to the requirements may be granted in cases where one of the specified product requirements cannot be met for technical or functional reasons (i.e. due to the absence of a functionally equivalent product or a design alternative meeting the requirements) or where the basic data cannot be prepared for a reasonable outlay. The deviation from the requirements shall be documented and justified, with details provided of the product, technical application and quantities used. Product exceptions for purely aesthetic reasons are excluded from this provision.

#### NBBW · Sustainable Construction in German Federal State of Baden-Württemberg

2011 version

Sustainability criterion 4 Physiologically harmless and environmentally compatible construction materials

**Category** D

**Product type** Adhesive for floor coverings

**Requirements**Construction products of significance to building control:

Ü/CE mark and EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113

Construction products of secondary significance to building control:

EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113

Rating Meets requirements for construction products of significance to building control.

**Exceptions** Deviations from the individual requirements for the sustainability criteria are allowable in duly justified exceptional cases,

provided such requirements are not prescribed by law. The deviations shall be presented and justified, in no specific

form, in writing.

## NaWoh · Quality Label for Sustainable Housing

2013 version (V 3.0)

**Criterion** 3.2.4 Avoidance of contaminants

**Indicator** Avoidance of contaminants

**Product type** Flooring adhesive

**Requirements** EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113

Rating Meets requirements.

#### HafenCity Ecolabel · Sustainable Construction in HafenCity Hamburg

2010 version

Category 3 Use of eco-efficient construction materials

**Product type** Flooring adhesive

**Requirements** Special attainments – silver EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R or RAL-UZ 113

Extraordinary attainments – gold EMICODE EC1/EC1R/EC1PLUS R or RAL-UZ 113

Rating Meets requirements for extraordinary attainments – gold.

**Exceptions** Exceptions to the requirements may be granted in cases where one of the product requirements cannot be met. The

deviation from the requirements shall be documented and justified, with details provided of the product, technical application and quantities used. Exceptions are only possible where evidence is provided that no design alternative can meet the requirements or that no functionally equivalent products are obtainable on the market for a reasonable outlay. Excep-

tions justified by purely aesthetic reasons are excluded from this provision.

#### **SWISS MINERGIE-ECO LABEL**

2014 version (with 2015 additions)

**Exclusion criterion** NA 08 Solvent emissions from construction and ancillary materials

**Requirements** No application of solvent-thinned products in heated interiors.

Laying materials with the EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R label meet the criterion.

Rating Meets requirements.

**Criterion** Materials and construction processes

Minergie-Eco specification list Line NM06

Product type Flooring adhesive

**Requirements** EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R

Rating Meets requirements.

**ECO-BKP** 281 Floor finishes

Product type Adhesive

Requirements Thin- or medium-bed laying with cementitious adhesives, with or without synthetic resin additives

Rating Meets requirements.

ECO-BKP 282 Wall finishes/coverings

Product type Thin-bed adhesive

**Requirements**Cementitious products, with or without synthetic resin

Rating Meets requirements.

2011 version (with 2015 additions)

**Exclusion criterion** NA 08 Solvent emissions from construction and ancillary materials

**Requirements**No application of solvent-thinned products in heated interiors.

Laying materials with the EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R label meet the criterion.

Rating Meets requirements.

**Criterion** Materials and construction processes

Minergie-Eco specification list Line NM06

Product type Flooring adhesive

**Requirements** EMICODE EC1/EC1R/EC1PLUS/EC1PLUS R

Rating Meets requirements.

**ECO-BKP** 281 Floor finishes

Product type Adhesive

**Requirements**Thin- or medium-bed laying with cementitious adhesives, with synthetic resin additives

Rating Meets requirements.

**ECO-BKP** 282 Wall finishes/coverings

Product type Thin-bed adhesive

**Requirements**Cementitious products, with or without synthetic resin

Rating Meets requirements.

#### **LEED** · Leadership in Energy and Environmental Design

2014 version (v4)

Credit EQ: Low-emitting materials

**Product type**Wet-applied adhesive

Requirements 1–3 points Pass in AgBB (German Committee for Health-Related Evaluation of Building Products)

test and compliance with Paints Directive (2004/42/EC).

Rating Meets requirements as EMICODE EC1PLUS R is better than AgBB test pass and product does not fall

under Paints Directive.

2009 version (2013 update)

Credit MR 4: Recycled content

**Requirements** 1 point 5% recycled content (by weight)

2 points 10 % recycled content (by weight)

Rating Meets requirements for 2 points as recycled content totals 23.95 %.

Credit MR 5: Regional materials

**Requirements** 1 point 5 % regional materials

(Manufacturing location is at max. distance of 800 km from construction site)

2 points 10% regional materials

(Manufacturing location is at max. distance of 800 km from construction site)

Rating Manufacturing location is Wiesbaden, Germany.

Credit IEQ 4.1: Low-emitting materials – Adhesives and sealants

**Product type**Ceramic tile adhesive

**Requirements** VOC content (without water) Max. 65 g/ltr

Rating Meets requirements.

#### BREEAM · Building Research Establishment Environmental Assessment Methodology

#### 2013 version (2014)

For further details, please contact our sustainability experts by phone on +49 (0)611 1707-293 or by e-mail at nachhaltigkeit@sopro.com.

#### **Further information**

#### **INGREDIENTS**

CAS numbers 65997-15-1 Portland cement

**65996-69-2** Complex mixture of calcium and magnesium silicates and aluminates

**544-17-2** Calcium formate **1305-62-0** Calcium hydroxide

#### PRECAUTIONARY STATEMENTS

Labelling

Danger. Contains Portland cement and calcium formate. Contains complex mixture of calcium and magnesium silicates and aluminates. Exhibits strong alkaline reaction upon contact with moisture/water; protection required for skin

and eyes. All standard precautions for the handling of construction materials/chemicals shall be taken. **H315** Causes skin irritation. **H318** Causes serious eye damage. **H335** May cause respiratory irritation. **P102** Keep out of reach of children. **P261** Avoid breathing dust. **P280** Wear protective gloves/protective clothing/eye protection/face protection. **P302+P352** IF ON SKIN: Wash with plenty of water and soap. **P305+P351+P338** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. **P310** Immediately call a

POISON CENTER or doctor. P332+P313 If skin irritation occurs: Get medical advice/attention.

German Water Hazard Class (WGK)

WGK 1 · Slightly hazardous to water

GISCODE ZP1 · Low-chromate to Regulation (EC) No 1907/2006, Annex XVII

#### **PUBLIC-SECTOR REGULATIONS**

Test certificates Technische Universität München:

- C2 TE S1 to DIN EN 12004

Ü/CE mark CPR-DE3/0658.1.eng

#### CORPORATE SUSTAINABLE RESPONSIBILITY

Guiding principle

Sustainability is a cornerstone in Sopro Bauchemie's corporate philosophy. This is always understood by the company as the simultaneous pursuit, with equal priority, of environmental, social and economic goals.

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Engagement in sustainability (memberships)

**EUF** · Federation of European Tile Fixers' Associations

GEV · German Association for the Control of Emissions in Products for Flooring Installation, Adhesives and Building

Materials

 $\textbf{DGNB} \cdot \text{German Sustainable Building Council}$ 

 $\textbf{MINERGIE} \cdot \text{Swiss Association for Sustainable Construction}$ 

Umweltallianz Hessen · Hessian Environmental Alliance, seminal project initiated by the Hessian Federal State government

Ökoprofit-Klub · Environmental counselling scheme for companies in the Hessian Federal State capital of Wiesbaden

Deutsche Bauchemie e.V. · German Construction Chemicals Manufacturers' Association

Quality management Certified to DIN EN ISO 9001

Energy management Certified to DIN EN ISO 50001

Technical data sheet Safety data sheet Declaration of performance Sustainability data sheet

All documents are available for downloading at www.sopro.com.

For further details, please contact our sustainability counselling service on +49 (0)611 1707-293.



