ESCOSIL-2000-UW

Underwater silicone

Material number	Contents	Packaging	Colour
205591003	310 ml	Cartridge	Cement grey
205591008	310 ml	Cartridge	Medium grey

Product features

- Natural stone silicone - contains a large amount of fungicide
- Oxime cure
- water resistant
- Resistant to chlorine and chemicals
- Non-corrosive
- Skin forms after ca. 6 minutes
- Hardening of approx. 2 - 3 mm on the 1st day

Advantages

- Developed especially for underwater use
- Non slump
- Convenient compaction properties
- High anti-fungal effect
- Easy to smooth

Areas of application

- For sealing expansion, movement and connecting joints in tiled finishes
- To produce movement joints in underwater areas (e.g. swimming pools)
- For walls and floors
- For interior and exterior use

Existing test certificates

EMICODE licence

ESCOSIL-2000-UW

Technical Data

Material properties

Product components	1 component system
Base material	Neutral curing silicone jointing compound Silicone oils
Consistency	Paste
Density (spec. weight)	approx. 1 g/cm³
Elongation at break (ISO 37)	approx. 700 %
Shore-A Härte (ISO 868)	approx. 20
Shore-A hardness (ISO 868)	approx. 20
Temperature resistance	- 40 + 180 °C
UV-resistant	true
Tensile elongation (DIN 53504)	approx. 450 %
Tensile strength (DIN 53504)	≥ 2.6 N/mm²
Tensile strength (ISO 37)	approx. 1.4 N/mm²
Zulässige Gesamtverformung (DIN EN ISO 11600)	max. 25 %

Application

Substrate temperature	from 5 °C to 35 °C
Hardening process per 24 hours	min. 2 mm
Foot traffic after	approx. 24 hours
Application temperature	from 5 °C to 35 °C
Hardening time / full resilience	approx. 7 - 14 days
Skin formation time	approx. 6 minutes

Material consumption

Material consumption rate according to the area of application

Joint dimensions and consumption (approx.) in m per 310 ml cartridge

Joint width in mm / Joint depth in mm	5	7	10	12	15	20	25
5.0	12.0 m	8.0 m	6.0 m				
7.0		6.0 m	4.0 m	3.0 m			
10.0			3.0 m	2.5 m	2.0 m	1.5 m	
12.0				2.1 m	1.7 m	1.2 m	1.0 m
15.0					1.3 m	1.0 m	0.8 m

Application technology

Aids/tools

- Smooth wood
- Flat trowel
- Craft knife
- Smoothing agent

Manual processing

Can be smoothed with a smoothing tool

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Substrate preparation

Requirement for substrate

1. Clean
2. Free of adhesion inhibiting substances
3. Dry

Priming table

Substrates	ESCOSIL-2000-UW Underwater silicone
Aluminium, untreated	Primer 1216 from OTTO-CHEMIE
Aluminium, anodised	Primer 1216 from OTTO-CHEMIE
Concrete	Primer 1218 from OTTO-CHEMIE
Chrome	Primer 1216 from OTTO-CHEMIE
Iron, abraded	×
Stainless steel	Primer 1216 from OTTO-CHEMIE
Glass	-
Wood, glazed	×
Wood, varnished	×
Synthetic stones	× (ESCOSIL-2000-ST)
Copper	×
Plastic (profiles)	-
Brass	×
Natural stones	× (ESCOSIL-2000-ST)
Polyester	Primer 1217 from OTTO-CHEMIE
Aerated concrete	×
PVC	Primer 1217 from OTTO-CHEMIE
soft PVC (films)	Primer 1217 from OTTO-CHEMIE
Sandstone	× (ESCOSIL-2000-ST)

× = not suitable

- = not required

Preparing the surface

1. No moisture may enter during hardening. This also applies to the edges and the joint edge.
2. Pre-treat the joint edges with OTTO Primer 1218 on cementitious substrates (e.g. ceramic tiles and boards, concrete, etc.).
3. When applying to metal (stainless steel, aluminium, hot-dip galvanisation, etc.), prime the joint edges with OTTO Primer 1216.
4. Carry out performance tests on the building on coated and plastic surfaces.
5. Allow the primer to dry.

Usage

Application

1. When filling with ESCOSIL-2000-UW, the general standards for jointing technology are essential.
2. Smooth the surface of the applied sealing compound using a smoothing agent and suitable tools before it can form a skin. Push the material into the joints and press onto the contact surfaces.
3. Water may only be present after 4 days at the earliest.

Cleaning tools

Immediately after use, clean tools with ASO-R001.

Storage conditions

Storage

Store in a cool and dry place. Min. 12 months in the original canister. Promptly use opened canister.

Disposal

Product leftovers can be disposed of in accordance with disposal code AVV 08 04 09.

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Notes

- Protect surfaces that are not to be treated from the effects of ESCOSIL-2000-UW!
- Avoid contamination on the skin and remove with soap and water if necessary.
- Unhardened sealing compound ESCOSIL-2000-UW must not get into eyes and/or mucous membranes. Rise the eyes immediately with a large amount of water and consult a doctor.
- Avoid extended and repeated skin contact.
- When using the primer, comply with all precautions for handling paints / solvents that contain solvents.
- Re-establish an alkaline environment after using acidic cleaning materials. The risk of mould/mildew is increased by the application.
- Use ESCOSIL-2000-ST for concrete and natural stones.
- Contains a mixture of butanone oxime silanes and butanone oxime. May cause allergic reactions. This must not be inhaled continuously, as damage to health cannot be ruled out.
- When using in swimming pools, chlorine disinfection must be performed to prevent a case of mould / algae. The alternative measures (e.g. UV radiation or ozonisation) do not have a disinfectant depot effect.
- Even water circulation must always be operating and must not be interrupted. The chlorine concentration must always be at least 0.3 mg per litre.
- Oil, tar and bitumen containing backing strips as well as materials based on natural rubber, chloroprene or EPDM are not suitable.
- All values given in the TM apply at +23 °C and 50% relative humidity.
- Carry out performance tests on the building when using on coated and plastic surfaces!
- Resistant to chlorine in the concentrations required to disinfect swimming pools
- Use a round cord to limit the jointing compound thickness in the joints to no more than 10 mm. A PE film can be inserted into the joint base to prevent three-sided bonding of the jointing compound if there is a low joint depth.
- The curing time extends as the silicone layer thickness increases.
- We recommend cleaning the hardened jointing compound with clear water before filling the swimming pool, in order to remove smoothing agent residues from the surface. Smoothing agent residues could encourage microorganisms to settle and cause mould/mildew.

Observe applicable safety data sheet!

Annotations

Colours

Medium grey

Cement grey