Technical datasheet

OTTOCOLL® S 495 SPECIAL

The silicone adhesive for panels

1-component silicone adhesive based on alkoxy, neutral cross-linking | For indoor and outdoor application | S 495

Characteristics

- Very good adhesion on many substrates - Suitable for all commercially available panels
- Flame retardant - building material class B1 according to DIN 4102 - Can be used under increased fire protection requirements
- Efficient wall panel mounting - Bonding of large wall surfaces in a short time
- Compatible with acrylic glass and polycarbonate - Does not cause stress cracks
- Elastic - Compensates movements
- Low odour - No odour nuisance
- Solvent-free - Room can be used immediately

Fields of application

- Bonding of wall cladding panels indoors, such as in sanitary, kitchen and catering areas and in cold storage rooms
- Bonding in rooms with increased fire protection requirements, such as in escape routes
- Bonding and mounting different materials, such as wood, wooden materials, plastics, metals and mineral substrates

Standards and tests

- Tested according to DIN 4102-B1 - hardly inflammable
- EMICODE® EC 1 Plus - very low emission
- French VOC-emission class A+
- Declaration in "baubook" Austria
- Suitable for applications according to IVD instruction sheet no. 30+35 (IVD = German industry association sealants)

Technical properties

Skin-forming time at 23 °C/50 % RH [minutes]	~ 45 [1]
Curing in 24 hours at 23 °C/50 % RH [mm]	~ 2
Processing temperature from/to [°C]	+ 5 / + 40
Density at 23 °C according to ISO 1183-1 [g/cm³]	~ 1,4
Viscosity at 23 °C	pasty, stable
Shore-A-hardness according to ISO 868	~ 45
Stress expansion modulus at 100 % according to ISO 37, type 3 [N/mm²]	~ 1,0
Tensile expansion according to ISO 37, type 3 [%]	~ 480
Tensile strength according to ISO 37, type 3 [N/mm²]	~ 3,0

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OTTO CHEMIE
SEALING & BONDING

Temperature resistance from/to [°C]	- 40 / + 150
Yield 310 ml cartridge [m²]	~ 3 [2]
Yield 580 ml foil bag [m²]	~ 6 [2]
Shelf life at 23 °C/50 % RH for cartridge/foil bag [months]	9 [3]

1) The skin formation time continuously extends over the course of ageing – this is a typical characteristic of the product and has no effect on curing and handling strength

2) If necessary, observe the specifications of the panel manufacturer

3) from production

These data are not suitable for the issue of specifications. Please contact OTTO-CHEMIE before issuing specifications.

Pretreatment

The adhesive surfaces must be cleaned and any contamination such as release agents, preservatives, grease, oil, dust, water, old adhesives/sealants and other substances impairing adhesion must be removed. Cleaning of non-porous substrates: Clean with OTTO Cleaner T (no flash-off time required) and a clean, lint-free cloth. Cleaning porous substrates: Clean surfaces mechanically, e.g. with a steel brush or a grinding disc, to remove loose particles.
The adherent surfaces have to be clean, free from fat, dry and sustainable.

Primer table

The demands on elastic sealings and bondings depend on the respective exterior influences. Extreme fluctuations in temperature, tensile or shear forces, repeated contact with water etc. demand high requirements of a bonding. In such cases it is advisable to apply primer according to the recommendations of our technical department (e. g. +/OTTO Primer 1216) in order to achieve a resilient bonding.

ABS	+ / T
Acrylic glass/PMMA	+ / T
Aluminium	+
Aluminium anodized	+ / T
Aluminium powder-coated	+ / 1101 / 1226 / T
Concrete	1105
Stainless steel	+
Epoxy resin fibreglass laminate	+
Glass	+
Glass, enamelled	+
Wood, varnished / painted	+ / 1226
Ceramic, glazed	+
Ceramics, unglazed	+
OTTOFLEX Slurry Seal Coating	OTTOFLEX® Adhesive primer / OTTOFLEX® Deep primer [1]
OTTOFLEX Protective Coating	+ [1]
Polyamide	+
Polycarbonate	+
Polyester	+
Cellular concrete	1105
Plaster	1105
PVC unplasticized	+ / 1226
Wall panels	T [2]
Zinc, galvanised iron	+

1) Observe drying time

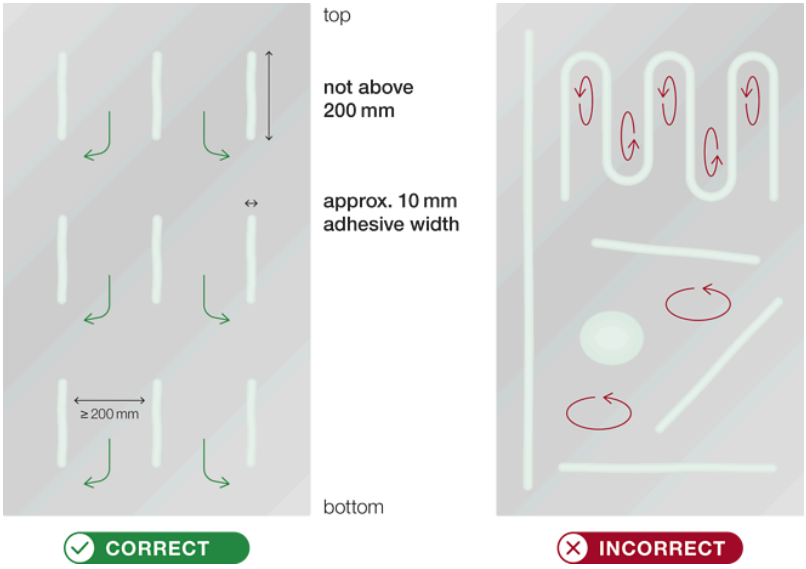
2) With regard to adhesion, the current overview list, which can be downloaded from the homepage, must be observed.

+ = good adherence without primer
- = not suitable
T = Test/pilot test advised

Important information

Before applying this product the user has to ensure that the materials in the area of contact (solid, liquid and gaseous) are compatible with it and also amongst each other and do not damage or alter (e. g. discolour) each other. As for the materials that will be used at a later stage in the surrounding area of the product the user has to clarify beforehand that the substances of content or evaporations do not lead to an impairment or alteration (e. g. discolouration) of the product. In case of doubt the user should consult the respective manufacturer of the material.
Not suitable for bonding façade panels in exterior areas.
During curing small amounts of alcohol are released.
Ensure good ventilation during application and curing.

Application information



The mechanical strength, necessary for the bonding, will be achieved after approx. 48 hours at the earliest (+23 °C, approx. 50% RH). Until this point a mechanical fixation is necessary. This can be done with removable mechanical aids, such as blocks, wedges or single-sided adhesive tapes from the front or with double-sided adhesive tapes from the rear (back).
Due to the many possible influences during and after application, the customer always has to carry out trials first.
We recommend to store our products in unopened original packagings dry (< 60 % RH) at temperatures of +15 °C up to +25 °C. If the products are stored and / or transported at higher temperatures / air humidity for longer periods (some weeks), a diminuition of durability or a change of material characteristics may arise.

Packaging

	310 ml cartridge	580 ml aluminium foil bag
white	S495-04-C01	S495-08-C01
Pieces per packaging unit	**20**	**20**
Pieces per pallet	**1200**	**600**

Due to typographical reasons the colours shown below may differ from the original colours of the products.

Safety precautions

Please observe the material safety data sheet.
After curing, the product is odourless.

Disposal

Information about disposal: Please refer to the material safety data sheet.

Brand information

EMICODE® is a registered trademark of GEV e. V. (Düsseldorf, Germany)

Warranty information

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