Marine Sealant
2K MS-3000/40 Gießhybrid

Quick-drying
2K
MS - Gießhybrid
for sticking and sealing

- quick drying
- long open processing time
- safe and reliable to use
- also usable in combination with our 1K-MS-construction adhesives and sealants



General

2K Marine Sealant MS-3000/40 Gießhybrid is a newly developed structural adhesive and sealant that, due to its special formulation, ensures controlled polymer cross-linking after just 6 hours. It is ideal for applications where the use of single-component moisture-curing adhesives and sealants (e.g., SMP, PUR, or silicone) is unfavorable due to their longer curing times.

2K Marine Sealant MS-3000/40 Gießhybrid hat eine Verarbeitungszeit (Topfzeit) bei +23 °C / 50 % RLF von ca. 55 Minuten und ein Mischungsverhältnis von 1:2.

It has been developed to completely fill narrow and deep joints quickly and efficiently. It can be used in combination with our 1K MS structural adhesives and sealants.

When applied to materials impermeable to moisture (e.g., metal, plastic, glass, and painted surfaces), it cures to 55–60% within 6 hours (at +23 °C / 50% RH) and can withstand moderate loads. A cure level of 75% is reached after approximately 24 hours, and full strength is achieved after approximately 7 days.

The adhesive therefore performs exceptionally well even when applied to wide gaps or sealing joints. The adhesive's exceptionally fast curing time, high tensile strength, and high elongation at break make it suitable for a wide range of applications.

2K Marine Sealant MS-3000/40 Gießhybrid is solvent- and silicone-free. For optimal application, use the dispensing trolley we collaborated on developing.

The workpieces to be bonded must be checked in advance to ensure they are suitable for bonding; test bondings may need to be performed. The workpieces must be dry and free of grease, oil, silicone, and dust.

For cleaning and degreasing, we recommend our **Pantasol** or **Pantasol Light** products (for sensitive surfaces). For some materials, it may be necessary to apply a primer or adhesion promoter beforehand, especially in environments with high humidity.

For non-absorbent substrates, we recommend our adhesion promoter "Aktivator/Waschprimer".

For slightly absorbent surfaces, our adhesion promoter "Primer/Technischer Haftanstrich" should be used.

To achieve a smooth finish, we recommend smoothing out **2K Marine Sealant MS-3000/40 Gießhybrid** with our "Abglättmittel" after application.

When applying the product without our dispensing trolley, components A and B are added together in a 1:2 ratio by volume into a suitable mixing container and thoroughly mixed using a mixing paddle and a power drill. Immediately afterward, the finished mixture must be poured into the prepared area.

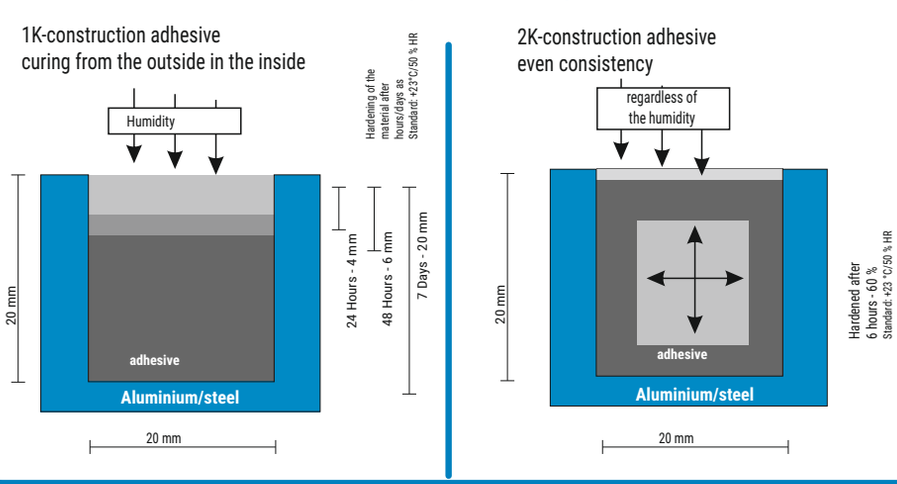
When using the dispensing trolley, be sure to use the appropriate static mixing tube. Before filling the gap with the mixed adhesive, dispense a small quantity of the adhesive into a separate container. Due to its lack of homogeneity, this mixture must not be used for the filling process and must be disposed of. A homogeneous mixture can be identified by its uniform color.

At the end of the work shift, the used static mixing tube remains on the mixing head; when work restarts, the static mixing tube needs to be replaced; before doing so, any cured adhesive on the mixing head opening must be removed.

After replacing the static mixing tube, press out a small amount of adhesive again and dispose of it as described above until a homogeneous mixture is achieved (check by observing the color). This procedure must be repeated every time the static mixing tube is replaced (recommended when the pot life expires).

2K Marine Sealant MS-3000/40 Gießhybrid is compatible to paint. The bonded parts should not be painted until the structural adhesive has fully cured; if painting before curing is carried out, blistering in the paint cannot be excluded.

What`s the difference between 1- component and 2- component construction adhesive?



The following guidelines must be followed during processing. A safty data sheet for users is availble upon request.

Technical Data

Basis:	2-component MS reactiv adhesive -sealant
Odour:	neutral
Mixing-ratio:	1 : 2
Hardness Shore-A:	after 7 Days ~ 40 (DIN 53505)
Density (mixture):	comp. A. ~1,2836 g/ml (at 23°C/50% RLF); comp. B. ~ 1,3986 g/ml (at 23°C/50% RLF)
Elongation at break:	30 % at (DIN EN ISO 8339)
Tensile stress:	~ 0,62 N/mm² at (DIN EN ISO 8339)
Elongation at break:	77% at (DIN 53504-1; S2)
Tensile stress:	~ 0,77 N/mm² at (DIN EN ISO 53504-1; S2)
Shearing viscosity:	(comp. A) 7881 mPa.s (Shearing rate 50 %): , (comp. B) 14060 mPa.s (Shearing rate 50 %).
Consistency (mixture):	liquid, appropriate for horizontal surfaces / gaps only.
Volume shrinkage:	~ 3,02 % at (DIN EN ISO 10563)
Pot life at 20 °C/50 % HR:	~ 55 minutes (+23 °C, 50 % HR)
Curing:	~ 6 hours (23°C, 50% RH to 55 - 60 %)
Water absorption:	1% (w/w) after 24 hours with a layer thickness of 2mm (based on DIN EN ISO 62:2008)
UV-resistance:	Tested in a Xeno chamber for 28 days (672 hours). Result very good.
Processing temperature:	from +5°C to ~ +26°C
Teperature resistance:	~ -40°C bis + 90°C without discolouration.
Can be painted over:	mnot before cured entireiy.
Shelf life:	6 months, in containers original sealed packaging (EN ISO 1183-1)
Disposal:	in accordance with legal requirements.
Chemical resistance:	**good:** against water, weak bases (0,5 NAOH, 1% Essigsäure), weak acids, oil- and grease. **fair:** against chlorine-based cleaning solution (8 %), aceton (Ketone), ethanol (alkohols). **Poor agaist:** concentrated acids, bases and chlorinated / aromatic hydrocarbons.

Adhesion:

glass	+	aluminium 6016	-
aluminium anodizd	+	Messing MS 63 Härte F 37	+
tiles	+	PVC Kömadur ES	-
pine wood	+	PVC weich	-
concrete formwork smooth	+	PC Makrolon Makroform 099	+
concrete sanded	+	Polyacyl PMMA XT 20070 Röhm	-
steel DC 04	+	Polystyrol PS Iroplast	-
steel hot dip galvanized	+	ABS Metzoplast ABS 7 H	-
stainless steel	+	PET	-
zinc	+	PU R	-
aluminium	+	Kupfer	+
aluminium AlMg1	+	GFK	+
aluminium AlCuMg1	+	EPDM	+

For flexible sealing of: Joints, gaps, holes in ship and boat building, swimming pool construction, hospitals, roof areas, etc.

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Product / Accessories

Product:	
Container sizes:	component A: 10 kg metal bucket; component B: 20 kg hobbock
Color:	anthracite; other colours available on request
Order number:	3046
Licence:	Awarting of licence for the use of EMICODE EC1 PLUS, Licence Number 1964/26.05.09.

Accessories:	
static mixing tube	Order number: 3035
2 C dispensing trolley	Order number: 3046-5
Pantasol Reiniger	aerosol 500 ml, order number: 4010 | can 1.000 ml, order number: 4210
Pantasol Light	aerosol 500 ml, order number: 4012 | can 1.000 ml, order number: 4212
Abglättmittel	pump sprayer 250 ml, order number: 4004 / bottle 500 ml, order number: 4005 / bottle 1.000 ml, order number: 4006
Grout smoother set WEFA	3 part, order number: 004101
Latex gloves	Size M, order number: 5500 | Size L,order number: 5501 | Size XL, order number: 5502
Aktivator / Waschprimer	can 250 ml, order number: 3605
Primer technischer Haftanstrich	can 250 ml, order number: 3505



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