

TECHNICAL DATA SHEET



ACRYLATE ADHESIVE Two-component



WELDYX® PREMIUM WELDYX® MASTER 5, 10 & 15

With WELDYX® MASTER structural, high-strength and at the same time flexible and highly resistant bonds are possible.

WELDYX® MASTER is a high-performance adhesive developed for structural bonding of metals, composites and plastics. Due to its uncompromising quality, it is specially adapted to the requirements of extensive industrial applications. Bondings of materials like aluminum and stainless steel are possible without priming. Due to its flexibility, also materials with different coefficients of thermal expansion can be structurally bonded. In comparison to others WELDYX® MASTER scores with a lower shrinkage as well as thermal, chemical and climatic stability.

With three different processing times and two container sizes, integrated into an optimal system of cartridge, dispensing gun and mixing nozzle, we offer a comprehensive, individual solution.

Sizes / article number

	MASTER 5 white	MASTER 10 white	MASTER 15 white
50ml Cartridge	100949	102455	100953
490 ml Cartridge	100951	102457	100955
	MASTER 5 black	MASTER 10 black	MASTER 15 black
50ml Cartridge	100957	105092	100961
490 ml Cartridge	100959	105089	100963

Storage & Durability

The shelf life is, at the optimum storage temperature of +2 °C to +15 °C in the closed original container, a maximum of 12 months. A higher storage temperature leads to a significantly lower durability and can lead to damage of the cartridge. The storage temperature must not be lower than +2 °C.

Properties (single components)

	white		black	
	Adhesive	Activator	Adhesive	Activator
Colour:	beige	white	beige	schwarz
Viscosity ¹⁾ [mPas]:	100.000 – 140.000	80.000 – 120.000	100.000 - 140.000	80.000 - 120.000
Mixing ratio A:B (volume):	10 : 1		10 : 1	
Mixing ratio A:B (weight):	9 : 1		9 : 1	
Density ²⁾ [g/ml]:	0,96 – 1,02	1,05 – 1,15	0,96 – 1,02	1,05 – 1,15
Flashpoint ³⁾ [°C]:	+12 °C		+12 °C	
Gap filling [mm]:	0,25-15		0,25-15	

1) At 25 °C, Brookfield viscometer

2) Measured according to DIN 53217, part 2 density sphere model 475 / III

3) Measured according to DIN 51755

Member of

GLUETEC GROUP

GLUETEC Germany WIKO WIKO Poland

GLUETEC Industrieklebstoffe GmbH & Co. KG
Am Biotop 8a
97259 Greußenheim - Germany
Tel: +49 (0) 9369 / 9836-0
info.de@gluetec.com
www.gluetec-group.com/de

WIKO KLEBETECHNIK Sp. z o.o.
ul. Ekonomiczna 8
42-271 Częstochowa – Poland
Tel: +48 (0) 34 372 58 58
info.pl@wikoklebetchnik.com
www.gluetec-group.com/pl

TECHNICAL DATA SHEET



Properties (cured adhesive)

	MASTER 5 white	MASTER 5 black	MASTER 10 white	MASTER 10 black	MASTER 15 white	MASTER 15 black
Colour:	white	black	white	black	white	black
Processing time [min]:	3 - 6	3 - 6	6 - 12	6 - 12	14 - 20	14 - 20
Fixing time [min]:	8 - 15	8 - 15	15 - 30	15 - 30	35 - 45	35 - 45
Final strength after [h]:	24	24	24	24	24	24
Density ¹⁾ [g/ml]:	0,97	0,97	0,97	0,97	0,97	0,97
Temperature resistance [°C]:	-40 bis +100	-40 bis +100	-40 bis +100	-40 bis +100	-40 bis +100	-40 bis +100
Elongation at break ²⁾ [%]:	ca. 100	ca. 100	ca. 100	ca. 100	ca. 100	ca. 100

1) Theoretical calculation from the densities of the individual components

2) Measured according to ASTM D638 / DIN ISO 6892

Tensile shear strengths¹⁾

Substrates	Tensile shear strengths
Fiberglass reinforced plastic	7 - 9 (substrate fracture)
PVC	11 - 13 (substrate fracture)
ABS	7 - 9
Cold rolled steel	approx. 17
Aluminum	14 - 18
Stainless steel	14 - 18
Acrylate	approx. 19

1) Tested to GLUETEC AA-310

Adhesion spectrum

Metals	Plastics	Composite materials
Aluminum ✓	Acrylates ✓	Vinyl ✓
Stainless steel ✓	Styrenics ✓	Carbon fibre ✓
Structural steel ✓	ABS Plastic ✓	Polyester (DCPD mod.) ✓
Powder coated metals ✓	PVC/CPVC ✓	Urethanes ✓
Galvanized metals ✗	Polyethylenes ✗	
Copper ✗	Polypropylenes ✗	
	Polytetrafluorethylenes (PTFE) ✗	
	Polyacetals ✗	

Instructions

Application

The optimum processing temperature is between +18 °C and +25 °C. A higher or lower temperature affects the processing time. Before each use it must be ensured that the mixer to be used is correctly attached to the cartridge and that the cartridge is correctly placed in the dispensing gun. Furthermore, it must be ensured that the surfaces to be bonded are not contaminated with oils, dust, paint, oxidation layers and all other contaminants. Before applying to the surfaces to be bonded, it is essential to squeeze a small amount of the adhesive to ensure complete mixing of both components, otherwise the adhesion properties will be reduced. The subsequent joining of the materials must take place within the processing time. After the end of the processing time, no strong mechanical stress on the adhesive should be achieved until complete curing, otherwise the adhesion properties will be affected. If you have further questions about the product or its application, please contact our application engineering.

TECHNICAL DATA SHEET



Surface preparation

In order to guarantee the optimum properties of WELDYX MASTER, it is imperative to clean the surfaces. The cleaning measures are to be individually adjusted to the materials and surfaces to be bonded:

Metals:

1. Use a clean cloth and pure acetone or isopropanol to remove dust and dirt from the surface.
2. Lightly roughen the surface by sanding or blasting.
3. Repeat step 1.

Plastics / Composites:

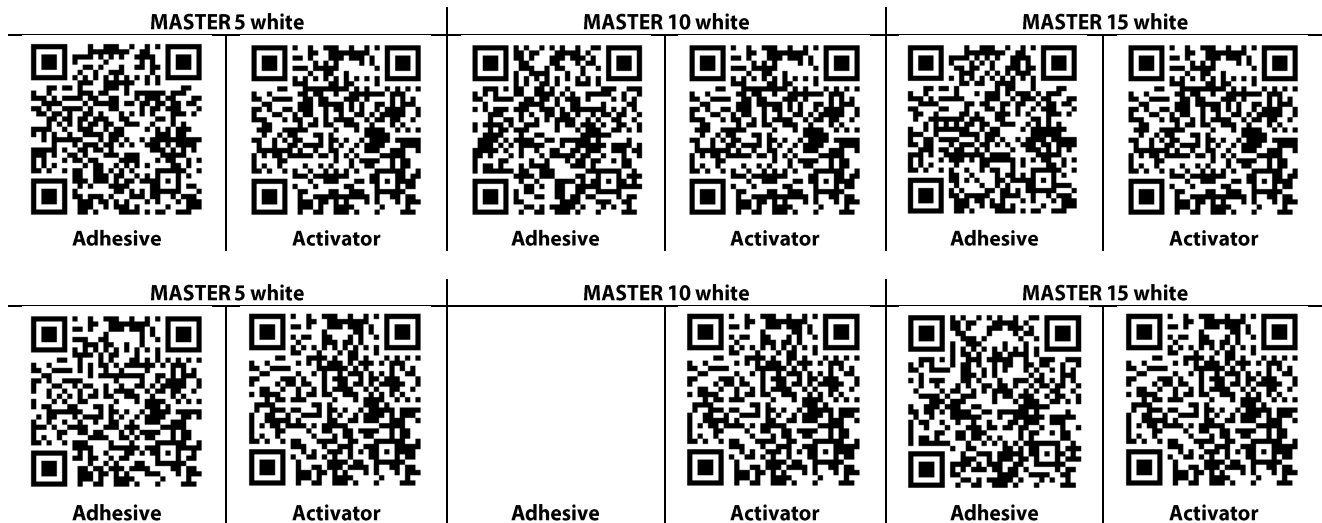
1. Clean the surface with a clean cloth and isopropyl alcohol to remove dust and dirt.
2. Lightly roughen the surface by grinding.
3. Repeat step 1.

CAUTION: Do not use gasoline or low quality alcohol for pretreatment.

Safety data sheets

Please refer to the current data sheet for safety relevant data.

Click or scan here:



Note:

Please note the information and notes in our respective safety data sheets. The data contained herein are for informational purposes only and are believed to be accurate to the best of our knowledge. We assume no liability for the results. For optimum functionality of the adhesive system, please only use the cartridge and mixer systems tested and released by GLUETEC. The product is only suitable for professional and experienced users. It is the user's own responsibility to take precautions to protect property and people from the hazards that may be encountered in handling and using these products. Accordingly, GLUETEC specifically disclaims any warranty, expressed or implied, including any warranty or suitability commitments for a particular purpose. In particular, GLUETEC disclaims all liability for consequential or indirect damages of any kind.