

MasterWeld is a fast curing, easy to use structural 2-part polyurethane adhesive which cures by a chemical reaction of the two components forming a durable polymer resistant to elevated temperature, moisture, fuel, many solvents and chemicals.

MasterWeld is specially designed for small, quick, durable bonding and repair jobs. The use of MasterWeld yields a fast turnaround due to early sanding and painting capability

MasterWeld shows good sag resistance properties, allowing vertical application and offers excellent gap filling properties. In combination with a reinforcing mesh broken or missing bumper tabs can be rebuilt.

With MasterWeld 60 Sec and Masterweld 210 sec both a faster and a version offering a longer open time and both showing the same mechanical properties are available.

TECHNICAL DATA*:**Nominal Components Properties:**

	MasterWeld IK	MasterWeld PK
Chemical base	Reactive Isocyanate Prepolymer	Reactive Polyol Mixture
Colour	Black	White
Specific Gravity [g/cm³]	~1,28	~1,21
Viscosity [cps or mPas]	~60.000	~50.000
Appearance	Sag Resistant Paste	Sag Resistant Paste

Typical Cure Characteristics:

Working Time	@ 23° C [sec]/[min]	90 / 1,5
Sanding Time	@ 23° C [min]	10
Clamp Time	@ 23° C [min]	5

Typical properties of Cured Adhesive:

Shore D Hardness	EN ISO 868 @ 23° C	63
Tensile Strength	EN ISO 527 @ 23° C [MPa]	23
Young's Modulus	EN ISO 527 @ 23° C [MPa]	420
Elongation at Break	EN ISO 527 @ 23° C [%]	55
Glass Transition Temperature	ISO 11357 [°C]	65

* Please consider the provisional status of the reported data. As a result of further trials, e.g. in further scaling-up MasterWeld the information and product data provided with this data sheet might be subject to change.

The information contained herein are given in good faith based on our current knowledge and experience on the product when properly stored, handled and applied under normal conditions in accordance with our recommendations. In practice the differences in materials, substrates and actual site conditions are such that no warranty in respect to merchantability or fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred from this data sheet. The recommendations or suggestions contained in this data sheet are made without guarantee as to results. We suggest that you test the product's suitability for the intended application and purpose prior to use. Our responsibility for claims arising from breach of warranty, negligence or otherwise is limited to the purchase price of the material. Wayside Adhesives Ltd reserves the right to change the properties of this product. The proprietary rights of third parties must be observed.

Lap shear information

Substrate	Pretreatment			Bondline thickness	Expected failure mode	Average strength
	Cleaning	Sanding	Cleaning			
CRS	Acetone	K80	Acetone	1mm	Cohesive failure	15,3 Mpa
SMC	Acetone	None	None	1mm	Substrate failure	5 Mpa
PVC	IPA	K120	IPA	1mm	Mixed failure	3,3 Mpa
PMMA	IPA	K120	IPA	1mm	Substrate failure	4 Mpa
PP	Acetone	K140	Acetone	1mm	Adhesive failure	1,3 Mpa

USE INSTRUCTIONS:

MasterWeld adhesive system has been designed for ease of dispensing with both hand-held manual and pneumatic applicator tools. To assure an on ratio dispense we recommend levelling the pistons by placing the opened cartridge in the dispenser and purge till material starts to flow from both cartridge chambers prior to attaching the mixer. After attaching the mixer tip (we recommend to only use the mixer tips included in the package; additional mixer tips can be ordered from Wayside Adhesives Ltd) and loading the cartridge into the dispense tool, pull the trigger at a constant and steady rate to force both prepolymer and curative through the mixer tip. It is recommended to discard the first 25 to 50 mm of dispensed material as it may be off-ratio. Sufficiently mixed on-ratio adhesive has a uniform black colour, is creamy, smooth and glossy.

The material in the mixer will become very difficult or impossible to dispense at about one-half of the open time. Either keep material flowing through the mixer during short periods of time adhesive is not needed or replace the mixer prior restarting dispense.

After having finished dispensing, leave the mixer in place till MasterWeld shall be used again. The remainder of the adhesive will have a shelf life of several weeks if stored properly. To start using MasterWeld again, remove the static mixer and dispose of properly. Carefully clean the cartridge nozzle, the products in the two chambers must be cleanly separated. If there is any black-tan mixing on either side dispense some product out of the openings with no mixer tip attached, until only single component product resides in each chamber. Finally attach a new mixer and start dispensing.

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Version 201805

SAFETY NOTE:

Please observe the information provided with the Material Safety Data Sheet.

MSDSs are provided to you under Wayside Adhesives Ltd's policy of communicating to our customer health, safety and environmental information for safe handling, use and disposal of our products. This information must be made available to health and safety personnel within your organization and to all employees who come in contact with these products.

STORAGE: Unopened containers stored at a dry place indoors at 15 – 32 °C

SHELF LIFE: 18 Months in the originally sealed cartridge

PACKAGING: MasterWeld is packed either in 25 ml by 25 ml or 110 ml by 110 ml side-by-side cartridges for use with a hand-held dispensing tool