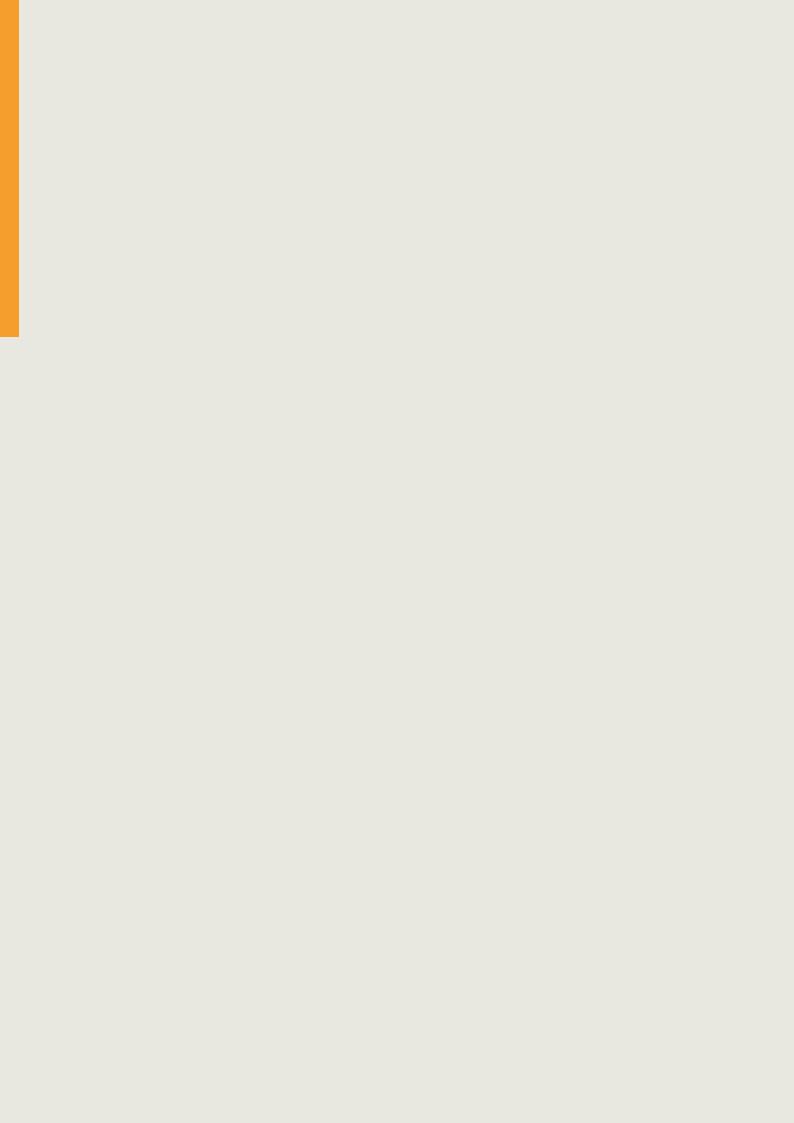


Your adhesive.

Bonding and sealing for industry, transportation and marine applications.





# When it comes to adhesives, merz+benteli ag is a pioneer

merz+benteli is the leading technical company in the field of permanently elastic adhesives and sealants based on silane-modified polymers. The SMP products, manufactured exclusively in Switzerland, are highly flexible, solvent-, isocyanate- and silicone free and are characterised by a wide adhesion range. merz+benteli develops, produces and distributes permanently elastic adhesives and sealants for all requirements and applications.

## Contents

Merbenit product range	2
Universal adhesives	(
High-tack adhesives	1(
Universal sealing adhesives	14
Fast-curing adhesives	18
Special sealants	2′
2C products	26
Large area adhesion	30
Cyanoacrylate adhesives	34



## Technology sets Merbenit apart

Merbenit is the brand for industrial bonding and sealing products based exclusively on state-of-the-art SMP technology. Merbenit products combine exceptional strength with elasticity, adhere to a wide variety of materials and are all environmentally friendly. The Merbenit product line contains a wide range of universal, special as well as one and two component products.

## **Advantages**

Combines exceptional strength with elasticity

Adheres to a variety of substrates and surfaces

Adhesion promoter usually not required

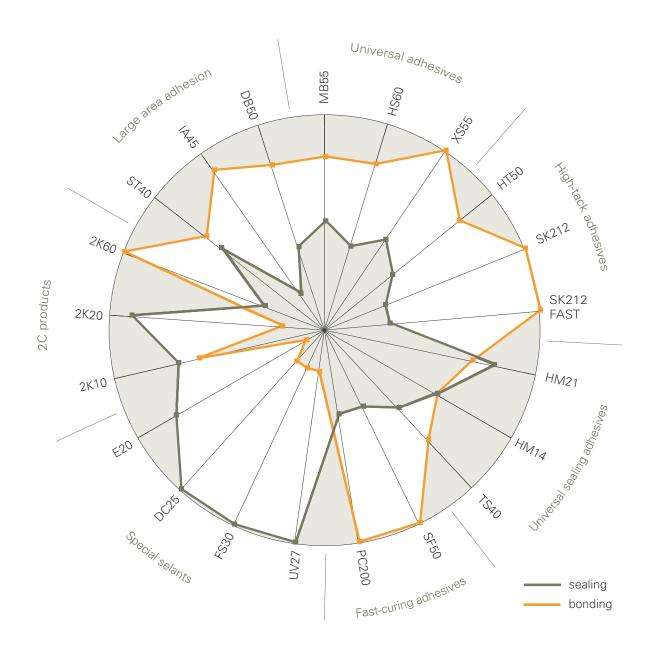
Compatible with paints

Free of isocyanates, solvents, halogens and silicone



Products labelled with this icon are a part of our core range and represent the latest technology. Samples and smaller orders are available upon request in most colours and packaging.

## Merbenit sealants and adhesives





## Universal adhesives

Merbenit universal adhesives are characterised by their extreme versatility. They combine high strength and elasticity with an extensive adhesion range. Suitable for statically and dynamically loaded bondings, they can absorb stress and compensate for various thermal expansions of the bonded materials.

## **Products**

Merbenit MB55 for bonds in the marine industry

Merbenit HS60 is approved for use in the food industry as well as for ventilation systems

Merbenit XS55 for high-strength bonds with a tensile strength of 5.5  $\ensuremath{\text{N/mm}^2}$ 

## Merbenit MB55 ® The marine adhesive and sealant

Merbenit MB55 is a high-strength elastic adhesive. It adheres to various materials and surfaces and is particularly resistant to environmental influences.

The adhesive fulfils the requirements of the International Maritime Organisation (IMO). Merbenit MB55, which is easy to process and compatible with paints, offers a wide adhesion range, elasticity and high mechanical strength. The adhesive is adjustable with a high tolerance.

### **Examples of use**

Flexible bonding of hatches, skirting boards, fittings, plates, sandwich components, panels, covers, screens, etc.

## Fulfils the following standards

IMO FTPC Parts 2+5

	Merbenit MB55
Shore A hardness	55
Elongation at break	approx. 300 %
Tensile strength	approx. 2.1 N/mm <sup>2</sup>
Consistency	stable
Tooling time	max. 10 min.
Curing rate after 24 h	≥ 2.0 mm



## Merbenit HS60 ® The universal adhesive

Merbenit HS60 is a high modulus, elastic adhesive with high strength. It adheres to a wide range of materials.

Merbenit HS60 has been approved for use in the food industry and for ventilation and air-conditioning systems. The product is permanently elastic from -40 °C to +90 °C and possesses high mechanical strength. It is furthermore characterised by its very good sealing properties.

### **Examples of use**

Flexible bonding in the areas of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis-, wagon-, vehicle- and container construction

Bonding in areas involved with the food processing industry

### Fulfils the following standards

ISEGA (food production area)

AC-plants according to VDI 6022

eco-bau 1st Priority ECO-BKP

Shore A hardness
Elongation at break
Tensile strength
Consistency
Tooling time
Curing rate after 24 h

Merbenit HS60
60
approx. 250 %
approx. 3.3 N/mm²
stable
max. 10 min.
≥ 2.0 mm

# Merbenit XS55 ® The extra strong constructive adhesive

Merbenit XS55 is a highly elastic adhesive with an especially high strength of 5.5 N/mm², which builds up very quickly. It adheres to various materials and surfaces.

This high elasticity adhesive offers excellent sealing properties and can be easily processed. Merbenit XS55 is impact and vibration resistant, grindable and coatable. Furthermore, it is compatible with paints and non-corrosive on surfaces.

#### **Examples of use**

High-strength and flexible bondings in the area of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis, wagon, vehicle and container construction

	Merbenit XS55
Shore A hardness	58
Elongation at break	approx. 350 %
Tensile strength	approx. 5.5 N/mm <sup>2</sup>
Consistency	stable
Tooling time	max. 6 min.
Curing rate after 24 h	≥ 2.0 mm



## High-tack adhesives

Merbenit high-tack adhesives offer a high initial tack and a quick strength build-up. When using Merbenit high-tack adhesives, fixating assembly parts is largely unnecessary. Apart from that, and depending on the application, it allows direct further processing.

#### **Products**

Merbenit HT50 has a high extrusion rate

Merbenit SK212 with a drive-away time of 60 minutes

Merbenit SK212 FAST with a drive-away time of 30 minutes

# Merbenit HT50 ® The high-tack adhesive

Merbenit HT50 is a permanently elastic adhesive with high initial tack. It adheres to many materials and surfaces and is also approved for use in the food industry.

The adhesive offers a high initial tack and, at the same time, good extrusion properties, has good sealing properties and is highly ageing-resistant. Merbenit HT50 is compatible with paints, stable, adjustable and permanently elastic from -40  $^{\circ}$ C to +90  $^{\circ}$ C.

#### **Examples of use**

Flexible, immediate supporting bond in the area of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis-, wagon-, vehicle- and container construction

For non-supported bonds and where a fast, continuous working process is required

Bonding in areas involved with the food processing industry

#### Fulfils the following standards

ISEGA (food production area)

eco-bau 1st Priority ECO-BKP

	Merbenit HT50	
Shore A hardness	50	
Elongation at break	approx. 250 %	
Tensile strength	approx. 2.9 N/mm <sup>2</sup>	
Consistency	stable	
Tooling time	max. 8 min.	
Curing rate after 24 h	≥ 3.0 mm	



## Merbenit SK212 ® The 60' windscreen adhesive

Merbenit SK212 is an elastic adhesive with high initial tack and strength. It is especially suitable for bondings that require quick handling strength.

The elastic adhesive is characterised by its high curing speed and very high mechanical strength. Merbenit SK212 is Euro-NCAP- and FMVSS 212-certified with a drive-away-time of 60 minutes. It is adjustable, impact and vibration resistant and bridges thermal expansion and material tension.

## **Examples of use**

Bonding of windscreens in vehicle-, wagon- and cabin construction

For non-supported bonds and where a fast, continuous working process is required

Flexible, immediate supporting bond in the area of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis, wagon, vehicle and container construction

#### Fulfils the following standards

FMVSS 212 drive-away time 60'

Euro-NCAP frontal impact 64 km/h

EMICODE EC1Plus R

Eurofins Indoor Air Comfort Gold

Shore A hardness
Elongation at break
Tensile strength
Consistency
Tooling time
Curing rate after 24 h

Merbenit SK212
55
approx. 300 %
approx. 3.3 N/mm <sup>2</sup>
stable
max. 15 min.
≥ 3.5 mm

## Merbenit SK212 FAST The 30' windscreen adhesive

Merbenit SK212 is an elastic adhesive with high initial tack and strength. It is especially suitable for bondings that require quick handling strength.

The adhesive offers tremendous mechanical strength, excellent sealing properties and a quick curing speed. Merbenit SK212 is Euro-NCAP- and FMVSS 212-certified with a drive-away time of 30 minutes. Merbenit SK212 FAST is suitable for powder- and thermocoating and short-term resistant to temperatures up to +200 °C. It bridges thermal expansion and material tension.

### **Examples of use**

Bonding of windscreens in vehicle-, wagon- and cabin construction

For non-supported bonds and where a fast, continuous working process is required

Flexible, immediate supporting bond in the area of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis-, wagon-, vehicle- and container construction

#### Fulfils the following standards

FMVSS 212 drive-away time of 30'

EMICODE EC1 $^{\text{Plus}}$  R

	Merbenit SK212 FAST
Shore A hardness	55
Elongation at break	approx. 325 %
Tensile strength	approx. 3.0 N/mm²
Consistency	stable
Tooling time	max. 10 min.
Curing rate after 24 h	≥ 3.5 mm



## Universal sealing adhesives

merz+benteli offers a wide range of universal, fast-curing and permanently elastic SMP-based one component sealing adhesives. Merbenit universal sealing adhesives are characterised by their well-balanced properties and cost effectiveness. They offer exceptional adhesive qualities and allow for easy processing.

#### **Products**

Merbenit HM21 is the ideal mix between adhesive and sealant

Merbenit HM14 is a universal sealing adhesive

Merbenit TS40 is a sealing adhesive for transparent applications

# Merbenit HM21 ® The premium adhesive and sealant

Merbenit HM21 is an elastic adhesive with excellent sealing properties. Thanks to its SMP base, the product is universally applicable and highly durable.

Merbenit HM21, compatible with paints, offers high elasticity, excellent mechanical strength and a long tooling time. It is grindable, coatable and non-corrosive on surfaces. This sealing adhesive offers a wide adhesion range and exceptional sealing properties.

#### **Examples of use**

Flexible bonding and sealing in the areas of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis, wagon, vehicle and container construction

Shore A hardness
Elongation at break
Tensile strength
Consistency
Tooling time
Curing rate after 24 h

Mei	rbenit HM21
45	
арр	rox. 350 %
арр	rox. 2.5 N/mm²
stab	ole
max	c. 30 min.
≥ 3.	.0 mm



## Merbenit HM14 The universal adhesive and sealant

Merbenit HM14 is a universal elastic adhesive with a chemically neutral curing system and excellent sealing properties.

This sealing adhesive offers a wide adhesion range, good compatibility with paints and excellent sealing properties. Merbenit HM14 makes for easy and long processing and is grindable, coatable, and non-corrosive on surfaces.

## **Examples of use**

Flexible bonding and sealing in the areas of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis, wagon, vehicle and container construction

Weak connection joints and bonding applications

### Fulfils the following standards

EMICODE EC1Plus R

Eurofins Indoor Air Comfort Gold

Shore A hardness
Elongation at break
Tensile strength
Consistency
Tooling time
Curing rate after 24 h

Merbenit HM14	
40	
approx. 250 %	
approx. 1.8 N/mm <sup>2</sup>	
stable	
max. 20 min.	
≥ 2.0 mm	

# Merbenit TS40 ® The transparent adhesive and sealant

Merbenit TS40 is a transparent, elastic adhesive with excellent sealing properties. It adheres to various materials and surfaces indoors.

Merbenit TS40 is synonymous with simple processing and finishing. The product is compatible with paints and is permanently elastic between -40 °C and +90 °C.

### **Examples of use**

Bonding of parts where a coloured adhesive would be distracting

Flexible bonding in the areas of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis, wagon, vehicle and container construction

### Fulfils the following standards

EMICODE EC1Plus R

Eurofins Indoor Air Comfort Gold

	Merbenit TS40
Shore A hardness	42
Elongation at break	approx. 225 %
Tensile strength	approx. 2.8 N/mm²
Consistency	stable
Tooling time	max. 6 min.
Curing rate after 24 h	≥ 2.0 mm



## Fast-curing adhesives

The fast-curing Merbenit adhesives are characterised by an extremely quick strength build-up and a superb final strength. These properties make sure that the bonded elements can be quickly processed and exposed to strain. Because these adhesives are based on neutrally cross-linking polymers, they can be used without thermal or chemical pre-treatment of the assembly part.

#### **Products**

Merbenit SF50 cures quickly and can be used immediately

Merbenit PC200 offers extreme temperature resistance

# Merbenit SF50 ® The rapid construction adhesive

Merbenit SF50 is a permanently flexible adhesive with high and especially quick strength build-up. The product adheres to various materials and surfaces.

Merbenit SF50 is suitable for powder- and thermocoating and short term resistant to temperatures up to +200 °C. It is compatible with paints, adjustable and non-corrosive on surfaces. Furthermore, the product offers excellent sealing properties.

## **Examples of use**

Flexible bonding in the areas of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis, wagon, vehicle and container construction

	Merbenit SF50
Shore A hardness	50
Elongation at break	approx. 200 %
Tensile strength	approx. 3.4 N/mm²
Consistency	stable
Tooling time	max. 8 min.
Curing rate after 24 h	≥ 3.5 mm

Measurements at +23  $^{\circ}\text{C}$  and 50  $\%\,\,\text{rh}$ 



## Merbenit PC200 The high temperature resistant adhesive

Merbenit PC200 is a short-term high temperature resistant, fast-curing, elastic sealant and adhesive with especially high and fast strength build-up, even at low temperatures.

The high temperature resistance up to 240 °C, allows for the elastic bonding of components which are exposed to short-term high temperatures in the production procedure or at the end application. Furthermore, Merbenit PC200 is compatible with paints, is adjustable, has great sealing properties and is non-corrosive on surfaces.

### **Examples of use**

After curing completely, the product can be heated for a short time up to 240  $^{\circ}\text{C}$  for powder- and thermocoating

Flexible bonding and sealing in the areas of metal, apparatus, machine and plane construction, etc.

## Fulfils the following standards

Eurofins Indoor Air Comfort Gold

## The recommended maximum processing conditions based on tensile shear strength

Test specimen: Anodised aluminium

Pre-storage: 9 days at 23 °C and 50 % rh

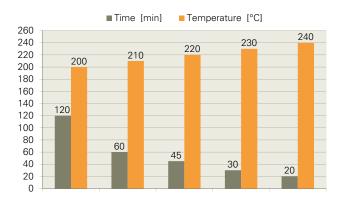
Oven: Linn High Term 400 heating chamber (muffle fur-

nace)

Paint: none

Shore A hardness
Elongation at break
Tensile strength
Consistency
Tooling time
Curing rate after 24 h
Curing rate after 24 h

Merbenit PC200	
57	
approx. 200 %	
approx. 3.7 N/mm²	
stable	
max. 8 min.	
≥ 2.5 mm	



## Special sealants

Special applications such as glass frame sealing, fire insulation or sealings which need a heat or cold insulation, require specific products; merz+benteli offers various special sealants to fulfil these requirements. Furthermore, they are compatible with paints and offer excellent UV and weather resistance.

### **Products**

Merbenit UV27 is suitable for self-cleaning glass

Merbenit E20 has a very low specific weight

Merbenit FS30 is flame-retardant

Merbenit DC25 is suitable for joints in the marine field



## Merbenit UV27 🛞 The premium sealant for glazing

Merbenit UV27 is an elastic joint sealant that adheres to many materials, especially to self-cleaning glass.

Merbenit UV27 fulfils the requirements of the International Maritime Organisation (IMO). The permanently elastic joint sealant is very resistant to UV radiation, ageing and environmental influences. Furthermore it is paintable as well as shock- and vibration-resistant.

### **Examples of use**

Sealing in areas of intense weather conditions and UV exposure

Suitable for connection and expansion joints in solar technology, air conditioning and ventilation, vehicle and apparatus construction, cabin construction, marine (e.g. sealing of portholes) and offshore applications

Sealing wood, metal and plastic windows

Sealing self-cleaning glass

#### Fulfils the following standards

IMO FTPC Parts 2+5

ISO 11600-G25-LM

SGG Bioclean

Shore A hardness
Elongation at break
Tensile strength
Consistency
Tooling time
Curing rate after 24 h

Merbenit UV27
20
approx. 500 %
approx. 1.5 N/mm <sup>2</sup>
stable
max. 15 min.
≥ 3.0 mm

Measurements at +23  $^{\circ}\text{C}$  and 50 % rh

## Merbenit FS30 The fire protection sealant

Merbenit FS30 is a flame-retardant, elastic and paintable sealant. The product adheres to various materials and surfaces.

Merbenit FS30 fulfils the highest branch standards as well as the requirements of the International Maritime Organisation (IMO). Furthermore, the product is permanently elastic between -40 °C and +90 °C and has excellent sealing properties. Merbenit FS30 allows for easy processing and offers minimal shrinkage. The sealant fulfils numerous fire safety standards and is very well suited for Minergie-ECO.

### Examples of use

General fire protection and coverage

Sealing of cable channels, pipe conduits and casings

Connection joints

## Fulfils the following standards

DIN 4102 B1

VKF fire index 5.3

VKF fire-resistance class S90

IMO FTPC Parts 2+5

ISO 11600-F20-HM

EMICODE EC1Plus R

Eurofins Indoor Air Comfort Gold

eco-bau 1st Priority ECO-BKP

Merbenit FS30Shore A hardness26Elongation at breakapprox. 225 %Tensile strengthapprox. 1.5 N/mm²ConsistencystableTooling timemax. 15 min.Curing rate after 24 h≥ 3.0 mm



## Merbenit DC25 The deck caulker

Merbenit DC25 is an elastic sealant for the caulking of teak decks in ship building. Merbenit DC25 is in particular resistant to environmental influences and fulfils the requirements of the International Maritime Organisation (IMO).

Merbenit DC25 allows for easy processing, quick grinding and is compatible with paints. The sealant is characterised by a high elasticity, a high mechanical strength and a very wide adhesion range.

## **Examples of use**

Suitable for sealing of teak, pitch pine, oak, sipo etc.

Sealing in areas of intense weather conditions and UV exposure

## Fulfils the following standards

IMO FTPC Parts 2+5

Shore A hardness
Elongation at break
Tensile strength
Consistency
Tooling time
Curing rate after 24 h

Merbenit DC25
30
approx. 600 %
approx. 1.6 N/mm <sup>2</sup>
pasty, not stable in
vertical joints
max. 20 min.
≥ 2.5 mm

Measurements at +23  $^{\circ}\text{C}$  and 50  $\%\,\,\text{rh}$ 

## Merbenit E20 The lightweight sealant

With a density of 0.70 g/cm³, Merbenit E20 is 50% lighter than other products. This permanent elastic adhesive and sealant is suitable for many industry and automotive applications.

Other special features are its vibration, noise and thermal insulation properties. Merbenit E20 is tolerance compensating, permanently elastic and tension equalizing.

### **Examples of use**

Absorption of vibrating elements

Isolation of voids and noise, heat and cold insulation in vehicle construction

Chassis sealing

Car interior bonding which are not exposed to strong stress

Shore A hardness
Elongation at break
Tensile strength
Consistency
Tooling time
Curing rate after 24 h



## 2C products

Merbenit two-component sealants cure after mixing, regardless of the humidity and surrounding temperatures, to become elastomers. Heavy loads can be applied after a few hours, even if the layer is thick or the material is not moisture permeable. These properties offer additional application opportunities as compared to one-component products.

#### **Products**

Merbenit 2K10 offers a long tooling time

Merbenit 2K20 is self levelling

Merbenit 2K60 only needs very little time before becoming strong enough to be handled

## Merbenit 2K10 The 2C universal adhesive

Merbenit 2K10, a two-component adhesive, achieves high strength regardless of the humidity. It adheres to various materials and surfaces, even if they are not breathable.

Merbenit 2K10 has a long processing time, a chemically neutral curing system and is permanently elastic between - 40 °C and + 90 °C. Furthermore, Merbenit 2K10 offers tremendous sealing properties with excellent resistance to weathering and ageing. The adhesive is virtually odourless and tolerance compensating.

#### **Examples of use**

Flexible bonding in the areas of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis, wagon, vehicle and container construction

\_\_\_\_

	Merbenit 2K10
Shore A hardness	45
Elongation at break	approx. 300 %
Tensile strength	approx. 2.4 N/mm²
Consistency	stable
Tooling time	max. 30 min.

Measurements at +23  $^{\circ}\text{C}$  and 50 % rh



## Merbenit 2K20 The 2C casting compound

Merbenit 2K20 is a self-levelling, two-component, SMP-based sealing compound. Handling strength achieved after 4 hours, even on moisture-impermeable substrates.

The self-levelling casting compound is based on a chemically neutral curing system and offers a wide adhesion range. Merbenit 2K20 is a permanently elastic and low-module product that offers excellent sealing properties.

### **Examples of use**

Horizontal casting, filling and sealing

Replenishing and protecting joints

Squeeze-type sealants in casing lids

Tolerance compensating bond

Shore A hardness

Elongation at break

Tensile strength

Consistency

Tooling time

Merbenit 2K20

30

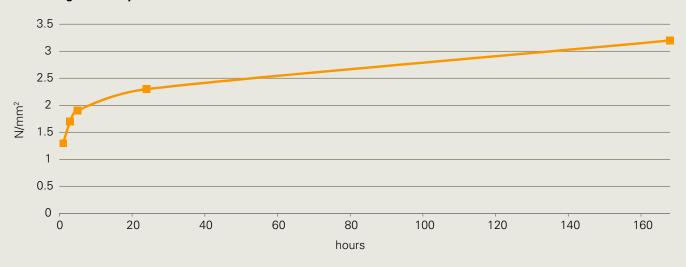
approx. 300 %

approx. 1.0 N/mm<sup>2</sup>

self levelling

max. 30 min.

## strength build-up



## Merbenit 2K60 ® The 2C rapid adhesive

Merbenit 2K60 is a permanently elastic two-component adhesive with extremely fast strength build-up and excellent adhesion properties, especially on plastics which are difficult to bond.

Merbenit 2K60 is easy to process, compatible with paints and offers protection against corrosion. Furthermore, the adhesive is shock and vibration resistant, offers tremendous sealing properties and is non-corrosive on surfaces.

### **Examples of use**

Flexible bonding in the areas of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis, wagon, vehicle and container construction

Shore A hardness
Elongation at break
Tensile strength after 1 h
Tensile strength after 7 d
Consistency
Tooling time

Merbenit 2K60			
48			
approx. 150 %			
approx. 1.3 N/mm <sup>2</sup>			
approx. 3.0 N/mm <sup>2</sup>			
pasty			
max. 4 min.			



## Large area adhesion

These products offer a long tooling time and easy processing. The wide adhesion range allows you to create numerous bonds with little effort. The products can be processed using a spatula or as a spray. Due to the permanently elastic setting, the tension equalizing bonds can be exposed to constant vibrations and movement.

#### **Products**

Merbenit ST40 is sprayable

Merbenit DB50 is suitable for use in the marine field

Merbenit IA45 has low viscosity and is fast curing

## Merbenit ST40 ® The sprayable adhesive and sealant

Merbenit ST40 is a sprayable, elastic adhesive with excellent sealing properties. This product allows for the efficient application of large area bondings.

Merbenit ST40 offers a long tooling time, compatibility with paints and is non-corrosive on surfaces. This shock and vibration resistant product adheres to many materials. Furthermore, Merbenit ST40 is suitable for powder- and thermocoating and short term resistant of up to +200 °C. The adhesive bridges gaps and cracks.

#### **Examples of use**

Large surface, flexible and sealing adhesion in the areas of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis, wagon, vehicle and container construction

	Me
Shore A hardness	32
Elongation at break	app
Tensile strength	app
Consistency	pas
Tooling time	ma
Curing rate after 24 h	≥ 2

Merbenit ST40		
32		
approx. 300 %		
approx. 2.1 N/mm <sup>2</sup>		
pasty, sprayable		
max. 25 min.		
≥ 2.0 mm		



## Merbenit DB50 The marine surface adhesive

Merbenit DB50 is an elastic adhesive for large area bonding for boat and ship building. It is particularly resistant to environmental influences and fulfils the requirements of the International Maritime Organisation (IMO).

Merbenit DB50's advantages include its high elasticity and mechanical strength, as well as its simple processing and long tooling time. The adhesive offers good ridge formation, a stable shape and does not run off inclined surfaces.

### Examples of use

Large surface, flexible and sealing adhesion in the areas of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis, wagon, vehicle and container construction

Suitable for flexible bonding of wood, aluminium, stainless steel, cork, plastic flooring (except polyethylene and polypropylene), etc.

### Fulfils the following standards

EMICODE EC1Plus R

Eurofins Indoor Air Comfort Gold

IMO FTPC Parts 2+5

	Merk
Shore A hardness	38
Elongation at break	appro
Tensile strength	appro
Consistency	good ly spi
Tooling time	max.
Curing rate after 24 h	≥ 2.0

Merbenit DB50
38
approx. 300 %
approx. 1.6 N/mm <sup>2</sup>
good ridge, efficient- ly spreadable
max. 60 min.
≥ 2.0 mm

Measurements at +23  $^{\circ}\text{C}$  and 50 % rh

## Merbenit IA45 The industrial adhesive

Merbenit IA45 is a solvent-free adhesive for application in very thin layers on one or both sides and which builds up strength quickly. It provides excellent adhesion, even on difficult plastics.

The adhesive allows for easy processing and offers minimal shrinkage. This product helps to avoid the risk of deformation of thin assembly parts due to heat development during the curing process. The use of adhesion promoters is often not necessary when Merbenit IA45 is used.

## Examples of use

Installation of sound-absorbing elements

Large area bonding

Flexible bonding in the areas of metal, apparatus and machine construction, plastics technology, air-conditioning and ventilation systems, chassis, wagon, vehicle and container construction

Shore A hardness
Elongation at break
Tensile strength
Consistency
Tooling time

Merbenit IA45		
45		
approx. 100 %		
approx. 3.6 N/mm <sup>2</sup>		
self levelling		
max. 10 min.		

Measurements at +23  $^{\circ}\text{C}$  and 50 % rh



## Cyanoacrylate adhesives

The Merbenit CA products are adhesives based on ethyl cyanoacrylate. Cyanoacrylate adhesives, also known as «super glue», are characterised by their quick curing.

Cyanoacrylate adhesives are versatile and can even be used with materials that are normally difficult to bond, such as rubber or plastics. They are particularly well suited for small-surface bonding.

The various Merbenit CA products have different adhesive properties, viscosity levels and curing speed on different materials.

#### **Products**

Merbenit CA10 for metals

Merbenit CA12 the universal type

Merbenit CA18 for porous surfaces

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## Merbenit CA10, Merbenit CA12 + Merbenit CA18

	Merbenit CA10	Merbenit CA12	Merbenit CA18	
Unit sizes	20 g	20 g	20 g	
Main application area	metals metals, melamine, phenolic resin	universal type various plastics, rubber, glass, metal, caoutch- ouc, leather, ceramic	porous surfaces wood, metal, synthetic materials, ceramic	
Chemical composition	Ethyl-2-Cyanoacrylate	Ethyl-2-Cyanoacrylate	Ethyl-2-Cyanoacrylate	
Density	1.06	1.05	1.06	
Viscosity at 23 °C mPa	100 - 130	70 - 80	600 - 1500	
Polymer solubility	Dimethylformamide, dimethyl sulfoxide, alkali			
Flash point °C	83	85	85	
Temperature resistance °C	up to 100	up to 95	up to 95	
Pressing time in seconds into: Metal (steel) Plastic (ABS) Rubber (EPDM)	90 - 120 30 - 120 10 - 60	40 - 60 5 - 15 5 - 15	20 - 50 5 - 7 1 - 4	
Tensile strength (steel) N/mm²	22	21	10 - 22	

## Distribution Partners

Antala S.L., www.antala.es, Distributor ES, PT Antala Itd., www.antala.uk, Distributor GB, IE

ATF, www.atf.ru, Distributor RU

Chenso Inc., www.chenso.com, Distributor USA, CAN, MEX

Credimex, www.credimex.ch, Distributor CH

Diatom A/S, www.diatom.dk, Distributor DK

Dialinas S.A., www.dialinas.gr, Distributor GR

Endüstri Teknik, www.endustriteknik.com, Distributor TR

G.A. Lindberg Chemtech AB, www.galindberg.se, Distributor SE, NO

Güteber Kft., probond@berenyizoltan.hu, Distributor HU

InnoSolv Pty Ltd, info@innosolv.com.au, Distributor Asia, Pacific

Koop Trgovina d.o.o., www.koop.si, Distributor SI

Mascherpa S.p.A., www.mascherpa.it, Distributor IT

MAVOM b.v., www.mavom.nl, Distributor BE, NE, LU

Reiss GmbH, www.reiss-kraft.de, Distributor DE, AT

Rotal Adhesives & Chemicals Ltd., www.rotal.com, Distributor IL

Samaro, www.samaro.fr, Distributor FR

Ulbrich Betriebs g.m.b.H., www.ulbrich.at, Distributor CZ, SK

YTM-Industrial Oy, www.ytm.fi, Distributor FI

Technical data sheets and material safety data sheets of Merbenit products can be found at www.merz-benteli.ch





















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