Technical Data Sheet

Wisacoll® AC 22 Cyanoacrylate adhesives



High performance instant adhesive for rubber, leather, wood, glass, cork, metals, plastics, porous materials, etc.

Application areas

Solvent-free 1C adhesives with versatile application possibilities like

- fonding of sealing profiles in window construction
- shoe repair
- in the entire construction, assembly and industrial sector
- for bonding and mounting rubber materials of all kinds, including sponge rubber, many plastics, like EPDM Ethulene-Propylene-Dien-Monomer, EPDM, NBP, CR, SBR, NR, ABS, PMMA, PS, PC and PVC-hard with each other and among themselves
- ideal for window manufacture, shoemaker's shops, handicraft and industry

Our standard Wisacoll AC 22 range has covered the majority of industrial and commercial requirements for over four decades. Other special types are available for specific applications. We will be happy to be of assistance to you.

Product benefits

- solvent-free
- fast polymerising adhesive layer
- ideal for rubber, good adhesion even on common materials like glass, ceramics, metals, leather, cork, wood etc.

Base modified cyanoacrylates

Density ca. 1.05 g/cm³

Refractive index ca. 1.5 (comparable to glass)

Flash point ca. 85 °C (acc. to DIN 55213)

Temperature application

range

from -40 °C until +85 °C

(except types AC 2297, AC 2296 and AC 22 Black until +120 °C)

The adhesive softens at higher temperatures.

Electrical properties Dielectric strenght (DIN 52481)

ca. 10 - 13 kV/mm ca. 5.3

Dielectric constant ε at a frequency of

1 MHz (DIN 53482)

Colour colourless-transparent (except AC 2256 Black = black)

Final strenght ca. 16 h at 23 °C and 50 % rel. humidity until final strength is achieved





Standard types - Main field of application	Viscosity	Standard packagings	Suitable for	
 Wisacoll AC 2222 lightning fast extremely high final strength ideal for bonding sealing profiles in window construction for very smooth surfaces with AC-primer 588 also suitable for silicone and TPE joints 	25 mPa*S low viscous (low viscous)	20 g 50 g (10 g) (500 g)	rubber leather plastics metals porous materials	++ + + 0
 Wisacoll AC 2212 fast, versatile good processing viscosity for shoe repair and the bonding of sealing profiles in window construction with AC-primer 588 also suitable for silicone and TPE joints 	120 mPa*S low to medium viscous	20 g 50 g (10 g) (500 g)	rubber leather plastics metals porous materials	+ + + + 0
 Wisacoll AC 2255 excellent for bonding: leather, wood, cork, ceramics, stone suitable for: furniture manufacture, doors industry, model and store construction good film formation also on absorbent substrates 	350 mPa*S medium-high visco	20 g (10 g) (50 g) (500 g)	rubber leather plastics metals porous materials	+ +++++++++++++++++++++++++++++++++++++
 Wisacoll AC 2256 Black black coloured instant adhesive with rubber particles and slightly longer setting time produces more aesthetic bonded joints on dark surfaces (rubber) good thermal resistance slow curing 	650 mPa*S medium-high visco	20 g (10 g) (50 g) (500 g)	rubber leather plastics metals porous materials heat resistant	+ + 0 + +
 Wisacoll AC 2233 excellent for bonding highly porous surfaces, as it is particularly viscous bridges tolerances up to 0.2 mm tip: in combination with an AC accelerator / activator 	3000 mPa*S highly viscous (viscous)	20 g (10 g) (50 g) (500 g)	rubber leather plastics metals porous materials	+ + + + ++





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Wisacoll AC Gel			rubber	+
 ideal for vertical surfaces and porous materials universal for: wood, ceramics, metal, plastics, rubber slow curing; readjustment possible 	100'000 mPa*S highly viscous	20 g	leather plastics metals porous materials	+ + +
easy to spanIt's not draining!	(gel-like, pasty)		non-dripping	++
Wisacoll AC 2299			rubber	+
 Type: tough-elastic, low viscous 	60	20 g	leather	+
 especially for elasticated adhesive joints 	60 mPa*S	(10 g)	plastics	+
 for flexible butt and mitre cuts 	low viscous	(50 g)	metals	+
 for soft, highly flexible materials such as 		(500 g)	porous materials	0
sponge rubber, soft leather etc.)	soft materials	++
			301t material3	- ' '
Wisacoll AC 2298			rubber	+
Type: tough-elastic, low viscous	0000	20 g	leather	+
particularly impact resistant!	2200 mPa*S		plastics	+
especially for soft, highly flexible	highly	(10 g)	metals	++
materials such as foamed materials,	viscous	(50 g)	porous materials	++
leather or smaller hard surfaces with different thermal expansion	Viceda	(500 g)	soft materials	++
Wisacoll AC 2297			rubber	+
Type: low viscous	40	20 g	leather	+
 especially for use in case of increased 	40 mPa*S	(10 a)	plastics	+
heat load until +120 °C	low viscous	(10 g) (50 g)	metals	+
	low viscous	(500 g)	porous materials	0
		(333 g)	boot resistant	
			heat resistant	++
Wisacoll AC 2296		20 g	rubber	+
Type: viscous	2600	209	leather	+
 especially for rough and porous 	mPa*S	(10 g)	plastics	+
substrates under increased thermal load	highly viscous	(50 g)	metals	+
until +120 °C	viscous	(500 g)	porous materials	++
			heat resistant	++
Special formulations			solutions for	
Further special types available like e.g.	_	20 g	special adhesive	
 non-blooming, odourless types special viscosity settings styrofoam-compatible types (Model making) 	from 3 mPa*S	(10 g) (50 g) (500 g)	surfaces	





Setting time

1st functional strength

Wisacoll	EPDM rubber	Neoprene rubber	Nitrile rubber	Holz balsa wood	ABC	Poly carbonate	Steel	Leather
AC 2222	2 - 4 S	1 - 3 S	1 - 3 S	1 - 2 S	3 - 5 S	3 - 10 S	5 - 20 S	
AC 2212	1 - 3 S	1 - 3 S	1 - 2 S	1 - 2 S	1 - 2 S	5 - 10 S	15 - 30 S	5 - 15 S
AC 2255	2 - 4 S	1 - 3 S	1 - 2 S	1 - 2 S	15 - 20 S	3 - 10 S	5 - 20 S	5 - 15 S
AC 2256 Black	15 S	15 S	15 S	20 S		30 - 40 S	30 - 40 S	
AC 2233	<7 S	5 S	5 S	<7 S	10 - 15 S	15 - 25 S	35 - 50 S	
AC 22 Gel	<7 S	<5 S	<5 S	<5 S	10 - 15 S	10 - 25 S	25 - 35 S	
AC 2299	<10 S	<10 S	<10 S	<15 S		20 - 30 S	25 - 40 S	
AC 2298	<10 S	<10 S	<10 S	<15 S		20 - 30 S	25 - 40 S	
AC 2297	<10 S	<10 S	<10 S	<15 S		20 - 30 S	25 - 40 S	
AC 2296	<10 S	<10 S	<10 S	<15 S		20 - 30 S	25 - 40 S	

The above values were determined at 23 °C and 50 % relative humidity and may vary depending on the age of the adhesive and the exact type of material. The respective pressing time must be evaluated by the user, as this depends on a variety of factors. It is generally recommended to add 4 times the setting time.

Tensile strength

Wisacoll	EPDM rubber	Neoprene rubber	Nitrile rubber	Steel	Aluminium	Poly carbonate
AC 2222	>2.5 N/mm ²	>5 N/mm ²	>5 N/mm ²			
AC 2212	2 - 6 N/mm ²	5 - 15 N/mm ²	5 - 15 N/mm ²			
AC 2255	>2.5 N/mm ²	>5 N/mm ²	>5 N/mm ²			
AC 2256 Black	>2.5 N/mm ²	>5 N/mm ²	>5 N/mm ²	>18 N/mm ²		
AC 2233	2 - 6 N/mm ²	5 - 15 N/mm ²	5 - 15 N/mm ²			
AC 22 Gel	>2.5 N/mm ²	>5 N/mm ²	>5 N/mm ²			
AC 2299			>10 N/mm ²	>15 N/mm ²	>10 N/mm ²	>6 N/mm ²
AC 2298			>10 N/mm ²	>15 N/mm ²	>10 N/mm ²	>6 N/mm ²
AC 2297			>10 N/mm ²	>15 N/mm ²	>10 N/mm ²	>6 N/mm ²
AC 2296			>10 N/mm ²	>15 N/mm ²	>10 N/mm ²	>6 N/mm ²

Tensile shear strength

Wisacoll	Nitrile rubber	Steel	Aluminium	Poly carbonate	ABC
AC 2222	>10 N/mm ²	>15 N/mm ²	>10 N/mm ²	>6 N/mm ²	6 - 10 N/mm ²
AC 2212	5 - 10 N/mm ²	15 - 25 N/mm ²	7 - 10 N/mm ²	5 - 10 N/mm ²	6 - 10 N/mm ²
AC 2255	>10 N/mm ²	>15 N/mm ²	>10 N/mm ²	>6 N/mm ²	6 - 10 N/mm ²
AC 2256 Black	>10 N/mm ²	>15 N/mm ²	>10 N/mm ²	>6 N/mm ²	
AC 2233	5 - 10 N/mm ²	15 - 25 N/mm ²	7 - 10 N/mm ²	5 - 10 N/mm ²	6 - 10 N/mm ²
AC 22 Gel	>10 N/mm ²	>15 N/mm ²	>10 N/mm ²	>6 N/mm ²	6 - 10 N/mm ²
AC 2299	>10 N/mm ²	>15 N/mm ²	>10 N/mm ²	>6 N/mm ²	
AC 2298	>10 N/mm ²	>15 N/mm ²	>10 N/mm ²	>6 N/mm ²	
AC 2297	>10 N/mm ²	>15 N/mm ²	>10 N/mm ²	>6 N/mm ²	
AC 2296	>10 N/mm ²	>15 N/mm ²	>10 N/mm ²	>6 N/mm ²	



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Processing

The bonding surfaces must be sound and free of dust and grease. Wisatyp TL 16 and Wisaclean R 101 have proved their worth in practice for the cleaning of the majority of adhesive surfaces. For PVC surfaces we recommend Wisaclean R 101. Our wide range of professional cleaners are described in detail on our website. In addition, the bonding surfaces can also be sanded immediately beforehand (metals) or cut (recommended for rubber).

Apply Wisacoll AC 22 as thinly as possible or in dots on one of the cleaned surfaces. Within the open time, join with the second part to be bonded and press under the highest possible pressure until sufficient functional strength is achieved.

The process takes between a few seconds and several minutes. Due to the low viscosities, the adhesive laver should not be thicker than 0.1 mm. For larger gaps, we recommend our high viscosity products like e.g. Wisacoll AC 2233 or Wisacoll AC 22 gel.

The complete curing of the product is influenced to a large extent by the prevailing humidity, the temperature and the materials used. If the relative humidity of the air is less than 30 %, there will be a considerable delay in the setting process. At more than 80 % relative humidity, shock hardening occurs with a sharp drop in strength. The amount of adhesive applied, adhesive film thickness, moulding pressure and other criteria also affect curing. The pressing time or curing time can be reduced by treating the bonding surface with ACB 2584 accelerator beforehand. This is particularly recommended for adhesive gaps larger than 0.1 mm.

Do not use in standing water

Well resistant to climatic and tropical conditions. Although the bonds of cyanoacrylate adhesives are moisture resistant, constant direct exposure to water should be avoided as this will significantly reduce the strength of the bond and over time it will no longer be guaranteed.

construction

To be observed in window When bonding external glazing bead seals in window construction, it is recommended that, in addition to mitre cut bonding with instant adhesives, the profile corners are also bonded to the glass pane in order to ensure permanent tightness against driving rain. For this purpose we recommend Wikosil-HTN.

aluminium

To be observed in case of Only use Wisacoll AC 22 on chemically pre-treated or lacquered surfaces.

Cleaning

Uncured Wisacoll AC 22 is cleaned with Wisaclean R 216 (fast evaporating) or Wisatyp SA solvent (slow evaporating). Cleaning of cured cyanoacrylate adhesive is usually achieved mechanically or with Wisaclean R 118.

Further information



You can find more information about this product (link to the product on our homepage, safety data sheet, certificates, special enquiries etc.) under the adjacent ISOPIN QR code.





Item no. + Colour	Item no.		Colour	Shipping unit	
Delivery form	AC 2222.20		transparent	20 pieces à 20 g	
	AC 2212.20		transparent	20 pieces à 20 g	
	AC 2212.50 AC 2255.20 AC 2256.20 Black AC 2233.20 AC 2233.50 AC 22.Gel AC 2299.20		transparent	20 pieces à 50 g	
			transparent	20 pieces à 20 g	
			black coloured	20 pieces à 20 g	
			transparent	20 pieces à 20 g	
			transparent	20 pieces à 50 g	
			transparent	20 tube à 20 g	
			transparent	20 pieces à 20 g	
	AC 2298.20		transparent	20 pieces à 20 g	
	AC 2297.20		transparent	20 pieces à 20 g	
	AC 2296.20		transparent	20 pieces à 20 g	
	a dry place between +15 °C and +25 °C, the official shelf life is from date of production. In the refrigerator the shelf life is up to in frozen form it is practically unlimited. In the latter case, the should be carefully brought to room temperature before use. Over storage time, viscosity increases and reactivity decreases				
Accessories	Item no.	Brief de	escription		
good to know	ACB 2584	AC accelerator / activator for faster curing of cyanoacrylate adhesives and improved curing of adhesive gaps >0.1 mm. Aerosol bottles à 200 ml.			
	AC 22.F30	AC 22 Filler white for filling holes, joints and gaps in combination with cyanoacrylate based instant adhesives. Bottles à 30 g.			
	AC 22.F40	AC 22 Filler anthracite (black) for filling holes, joints and gaps in combination with cyanoacrylate based instant adhesives. Bottles à 40 g.			
	AC 2200.02	AC dropper dispenser (capillary nozzle) for fine dispensing of Wisacoll AC 22 adhesive. Size 2 (small)			
	AC 2200.05	AC dropper dispenser (capillary nozzle) for fine dispensing of Wisacoll AC 22 adhesive. Size 5 (large)			
	AC 2200.18		AC bottle nozzles for 10g, 20g and 50g bottles. Replacement for dried-out nozzles.		

Safety and disposal: Familiarise yourself with the valid Safety Data Sheets (SDS) for the products used. All applicable safety regulations and disposal instructions must be observed.



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Observe: All information is based on careful examinations in the labs and our previous practical experience. They are noncommittal notes. Due to the many materials that are marketed and the different processing methods, which we cannot influence, we can, of course, not assume any warranty, including under patent-law, for the result of your work. We recommend performing sufficient own tests to find out if the product meets the respective requirements. In addition, we refer to our terms and conditions of sale, delivery and payment, available at www.wisabax.ch/agb.html. © Wisabax AG - This technical data sheet replaces all older versions.

Have you noticed an unclear formulation or an error? Thank you for your feedback. In case of doubt, the German version of the technical data sheet applies.

