

Description

adhere Cyanoacrylate Adhesives are superior quality, high purity single part adhesives which have numerous applications in all aspects of high technology, high performance assembly. Curing at room temperature in seconds, they provide excellent bond strength on a wide range of similar and dissimilar substrates including rubber, plastics, metal, wood, leather, ceramics, ferrites, stone, cork, composites and paper. The range includes surface-insensitive, fast cure and low odour, low blooming formulations.

Single component systems, *adhere* Cyanoacrylate Adhesives are fast and easy to use. They require no mixing or heating, and parts being bonded do not need clamping. They are solvent free. They achieve high tensile and shear strengths.

Cyanoacrylate adhesives (CA's) are sometimes generically known as "superglues" or "instant adhesives".

Their high quality formulation and manufacture ensures excellent manufacturing repeatability and high stability – facilitating long shelf life. The application of **adhere Cyanoacrylate Adhesives** can be automated easily for highly efficient production line use; ask us about a complete line of suitable dispensing equipment.

The range also includes an activator for even faster cures, and a primer which facilitates bonding of difficult to bond plastics.

If you are interested in **ISO 10993 cyanoacrylate adhesives** for medical applications, <u>please contactus</u>.



Features & Benefits

- High performance, professional grade
- Surface insensitive formulations
- Low odour, low bloom formulations
- Rubber toughened
- From very low to gel viscosities
- Cure in seconds
- Easy to use
- Single component system
- Room temperature cure
- Solvent free
- Bond a wide variety of substrates
- High tensile and shear strength
- Clear bond lines
- Easily automated
- Extended shelf life
- Excellent product clarity

Applications



General purpose					
ADH 9420	Very low viscosity, general purpose cyanoacrylate adhesive. Wicking grade.	High strength bonding of most plastics, rubber, metals and other common substrates. Recommended for use on assemblies with close fitting parts and smooth, even surfaces. Can be used postassembly by wicking into joints.			
Rapid cure, surface insensitive					
ADH 9406	Rapid cure, surface insensitive cyanoacrylate adhesive with low viscosity.	Suitable for bonding difficult substrates, plastics, rubbers and elastomers, e.g. EPDM. Also very fast general purpose low viscosity adhesive. Use with ADH 9770 primer to bond polyolefin polymers like polypropylene and polyethylene.			



ADH 9401	Rapid cure, surface insensitive cyanoacrylate adhesive with medium viscosity.	Suitable for bonding difficult substrates, absorbent and porous surfaces, e.g. paper, wood, cardboard and leather. Also suitable for plastics, metals, ceramics and rubbers where super-fast cure is required. Automotive trim.
Surface insensitive		
ADH 9416	High viscosity, surface insensitive cyanoacrylate adhesive. Gap filling.	Formulated for bonding plastics, rubbers, wood, paper, cardboard, leather, metals and other common substrates. Suitable for porous substrates where gap fill is required (e.g. foam rubber, cork).



ADH 9485	High viscosity, impact and peel resistant formulation.	Develops strong bonds on most metals, plastics or rubbers. Specifically formulated for applications requiring both a high viscosity and resistance to peel forces and impact.			
ADH 9454	Surface insensitive cyanoacrylate adhesive with a very high, gel viscosity. Non-drip.	Formulated for high strength general purpose bonding of most metal, wood, card, plastic, rubber, leather, fabrics and other common substrates. It is also suitable for use on vertical and overhead surfaces as will not drip or slump.			
Low odour, low bloom					



ADH 9408	Low viscosity, low odour, low bloom cyanoacrylate adhesive.	Suitable for most plastics, rubbers and other common substrates. Low odour, reduced need for ventilation. Low bloom, no whitening. Recommended for use on close-fitting parts and smooth even surfaces. Wicking grade.
ADH 9460	Medium viscosity, low odour, low bloom cyanoacrylate adhesive.	Formulated for rapid, general- purpose bonding for most plastics, rubbers and other common substrates. Low blooming characteristics for good aesthetics. Low odour.
ADH 9403	High viscosity, low odour, low bloom cyanoacrylate adhesive. Gap filling.	Suitable for most plastics, rubbers and other common substrates. Has good gapfilling capability. Low odour, reduced need for ventilation. Low bloom, no whitening.
Rubber toughened	1	1



ADH 9105	High viscosity, black, rubber toughened cyanoacrylate adhesive.	With higher impact, humidity and temperature resistance, provides a more flexible bond than standard cyanoacrylate adhesive. Can be used in temperatures up to 105°C (125°C intermittent). Suitable for metals, plastics and rubbers. Gap filling and resists vibration, thermal shock. Also used on pcb's to provided strain relief, wire tacking. Loudspeakers.
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ADH 9480	Medium viscosity, black, rubber toughened cyanoacrylate adhesive. High temperature resistance.	Higher peel and shock resistance. Has a longer setting time than other grades which allows more time for users to assemble substrates after application. It has been specially formulated to achieve the strongest possible bond between well-mated, non-porous surfaces, such as rubber, metals, plastics, etc. Up to 125\mathbb{M}C.
Activator/accelerator		
ADH 9455	Cyanoacrylate activator.	Accelerates cure of cyanoacrylate adhesives. Cures excess adhesive, minimises blooming. Assists cure in non-interfacial applications, and for slower, high viscosity cyanoacrylate adhesives. Treatment of porous substrates to prevent too much adhesive absorption.



Primer		
ADH 9770	Cyanoacrylate primer.	Improves the adhesion of cyanoacrylate adhesives to difficult to bond plastics such as polypropylene, polyethylene, silicone rubber and even ptfe (Teflon®). Dries in less than 30 seconds, useful life on part is up to 8 hours.

Part number	Description	Colour	Viscosity (cps)	Gap fill (mm)	Fixture time (sec)
General purpos	se				



Part number	Description	Colour	Viscosity (cps)	Gap fill (mm)	Fixture time (sec)
ADH 9420	Very low viscosity, general purpose cyanoacrylate adhesive	clear	5	0.05	5 to 15
Rapid cure, su insensitive	rface				
ADH 9406	Rapid cure, surface insensitive cyanoacrylate adhesive with low viscosity	clear	20	0.10	3 to 30



Part number	Description	Colour	Viscosity (cps)	Gap fill (mm)	Fixture time (sec)
ADH 9401	Rapid cure, surface insensitive cyanoacrylate adhesive with medium viscosity	clear	100	0.15	3 to 25
Surface insens	sitive				
ADH 9416	High viscosity, surface insensitive cyanoacrylate adhesive	clear	1500	0.2	5 to 60
ADH 9485	High viscosity, impact and peel resistant formulation	clear, slightly cloudy gel	3,500 to 6,000	0.2	3 to 120



Part number	Description	Colour	Viscosity (cps)	Gap fill (mm)	Fixture time (sec)
ADH 9454	Surface insensitive cyanoacrylate adhesive gel	clear	50-90,000 thixotropic	0.5	3 to 60
Low odour, lov	v bloom				
ADH 9408	Low viscosity, low odour, low bloom cyanoacrylate adhesive	clear	5	0.05	5 to 60
ADH 9460	Medium viscosity, low odour, low bloom cyanoacrylate adhesive	clear	100	0.15	10 to 60



Part number	Description	Colour	Viscosity (cps)	Gap fill (mm)	Fixture time (sec)
ADH 9403	High viscosity, low odour, low bloom cyanoacrylate adhesive	clear	1000	0.2	20 to 60
Rubber toughe	ened				
ADH 9105	High viscosity, black, rubber toughened cyanoacrylate adhesive	black	3,500-5,000	0.2	20 to 90



Part number	Description	Colour	Viscosity (cps)	Gap fill (mm)	Fixture time (sec)
ADH 9480	Medium viscosity, black, rubber toughened cyanoacrylate adhesive. High temperature resistance	black	500-1,000	0.2	20 to 90
Activator/acce	lerator				
ADH 9455	Cyanoacrylate activator	clear/amber	1		
Primer					
ADH 9770	Cyanoacrylate primer	clear	1		



Safety Data Sheets

For the latest SDS for this product, please e-mail msds@intertronics.co.uk

Guidelines for Use

Cure speed is very fast, so ensure that it properly aligned the parts before assembling with adhesive. ADH 9455 Activator may be used if there are any gaps or porous surfaces. Some plastics or rubbers may have better bonding performance with the use of ADH 9770 Primer. Ensure parts are clean, dry and free from oil and grease. If necessary, use a <u>suitable cleaner</u> prior to bonding. Cyanoacrylate adhesives can be hand applied direct from the bottle – a suitable dispensing needle can be added to the bottle nozzle for more precision. The application of *adhere* Cyanoacrylate Adhesives can be automated easily for highly efficient production line use; <u>ask us</u> about our complete line of suitable dispensing equipment.

Apply the adhesive sparingly to one surface and press parts firmly together until handling strength is achieved. As a general rule, as little cyanoacrylate adhesive as possible should be used – overapplication will result in slow cure speed and lower bond strength.



We do not normally recommend cyanoacrylate adhesives for structural glass bonding. Whilst the initial bond strength may be high, it tends to decrease with age. We have other <u>structural adhesives</u>, including <u>light curing adhesives</u>, which are likely to give more durable and robust bonds.

Cure speed

Cure speed is dependent on the substrates to be bonded. Best results come with close-fitting parts. Larger bondline gaps will give longer cure times. ADH 9455 Activator can be used to increase cure speed (some loss of optimal bond strength can result). Low temperature and low humidity will tend to slow up the curing process.

Chemical resistance

adhere Cyanoacrylate Adhesives have very good chemical resistance to most oils, leaded petrol, alcohols and light duty cleaning solvents. Cyanoacrylates are not resistant to high levels of moisture and humidity over time.

Storage

Store in a cool, dry area out of direct sunlight to achieve 12 months shelf-life. Refrigeration to 5 °C will help give optimal stability.

Products Storage conditions



ADH9105 ADH9401 ADH9403 ADH9406 ADH9408 ADH9416 ADH9420 ADH9454 ADH9454 ADH9480 ADH9485	Store in cool, well ventilated area. Keep container tightly closed. Avoid storing in hot and humid conditions and store away from water, strong acids and strong oxidising agents.
ADH9455	Protect from freezing and direct sunlight. Store in a dry place. Do not store near heat sources or expose to high temperatures. Keep away from heat, sparks and open flame. Avoid heat, flames and other sources of ignition. Avoid exposing aerosol containers to high temperatures or direct sunlight.



	Store in cool, well ventilated area. Keep
	container tightly closed. Keep away from
	sources of ignition. Keep away from direct
	sunlight. Prevent the build-up of electrostatic
ADI 10770	charge in the immediate area. Ensure lighting
ADH9770	and electrical equipment are not a source of
	ignition. Avoid storing with strong oxidising
	agents and strong acids and avoid storing in
	direct sunlight, on hot surfaces, when sources
	of ignition, flames or heat could be present.

ADH 9455 Activator

Apply activator to parts to be bonded, allow the solvent to evaporate, and then immediately apply adhesive and assemble. Alternatively, ADH 9455 Activator can be sprayed onto exposed cyanoacrylate adhesive bondlines for immediate cure.

ADH 9770 Primer

Apply primer only to substrates requiring priming (low surface energy plastics, rubbers, etc), allow the solvent to evaporate, and then immediately apply adhesive and assemble. Primer will also increase cure speed.

Other Information

Our adhere Cyanoacrylate Adhesives' ergonomic 20 gram and 50 gram pin cap HDPE bottles are



designed for easy manual application. The caps have an integral pin which keeps adhesive flow open and unrestricted. All of our cyanoacrylates are also available in 500 gram HDPE bottles for pressure pot and automated application. We supply a complete range of automatic, semi-automatic and manual dispensing systems and components compatible with our range of cyanoacrylate adhesives.



Cyanoacrylate adhesives are used for bonding plastics, as well as many other substrates





We provide a full range of dispensing products for cyanoacrylate adhesives



We have equipment for dispensing from



tubes for gel grades



The 10 Myths Abaout Cyanoacrylate Adhesives

This guide provides an overview to cyanoacrylate adhesives and dispels 10 of their most widely believed myths.

Ordering Information





20 gram cyanoacrylate pin cap bottle





50 gram cyanoacrylate pin cap bottle





500 gram cyanoacrylate bottle





20 gram tube of cyanoacrylate gel



20 ml cyanoacrylate primer bottle





200ml cyanoacrylate activator aerosol

Part number	Description	Packaging
ADH9420		
ADH9420-20G	Very low viscosity, general purpose cyanoacrylate adhesive	20 gram pin cap bottle



Part number	Description	Packaging
ADH9420-50G	Very low viscosity, general purpose cyanoacrylate adhesive	50 gram pin cap bottle
ADH9420-500G	Very low viscosity, general purpose cyanoacrylate adhesive	500 gram bottle
ADH9406		
ADH9406-20G	Rapid cure, surface insensitive cyanoacrylate adhesive with low viscosity	20 gram pin cap bottle
ADH9406-50G	Rapid cure, surface insensitive cyanoacrylate adhesive with low viscosity	50 gram pin cap bottle
ADH9406-500G	Rapid cure, surface insensitive cyanoacrylate adhesive with low viscosity	500 gram bottle
ADH9401		



Part number	Description	Packaging
ADH9401-20G	Rapid cure, surface insensitive cyanoacrylate adhesive with medium viscosity	20 gram pin cap bottle
ADH9401-50G	Rapid cure, surface insensitive cyanoacrylate adhesive with medium viscosity	50 gram pin cap bottle
ADH9401-500G	Rapid cure, surface insensitive cyanoacrylate adhesive with medium viscosity	500 gram bottle
ADH9416		
ADH9416-20G	High viscosity, surface insensitive cyanoacrylate adhesive	20 gram pin cap bottle
ADH9416-50G	High viscosity, surface insensitive cyanoacrylate adhesive	50 gram pin cap bottle
ADH9416-500G	High viscosity, surface insensitive cyanoacrylate adhesive	500 gram bottle



Part number	Description	Packaging
ADH9485		
ADH9485-500G	High viscosity, impact and peel resistant cyanoacrylate adhesive	500 gram bottle
ADH9454		
ADH9454-20G	Surface insensitive cyanoacrylate adhesive gel	20 gram tube
ADH9408		
ADH9408-20G	Low viscosity, low odour, low bloom cyanoacrylate adhesive	20 gram pin cap bottle
ADH9408-50G	Low viscosity, low odour, low bloom cyanoacrylate adhesive	50 gram pin cap bottle
ADH9408-500G	Low viscosity, low odour, low bloom cyanoacrylate adhesive	500 gram bottle
ADH9460		



Part number	Description	Packaging
ADH9460-20G	Medium viscosity, low odour, low bloom cyanoacrylate adhesive	20 gram pin cap bottle
ADH9460-50G	Medium viscosity, low odour, low bloom cyanoacrylate adhesive	50 gram pin cap bottle
ADH9460-500G	Medium viscosity, low odour, low bloom cyanoacrylate adhesive	500 gram bottle
ADH9403		
ADH9403-20G	High viscosity, low odour, low bloom cyanoacrylate adhesive	20 gram pin cap bottle
ADH9403-50G	High viscosity, low odour, low bloom cyanoacrylate adhesive	50 gram pin cap bottle
ADH9403-500G	High viscosity, low odour, low bloom cyanoacrylate adhesive	500 gram bottle
ADH9105		



Part number	Description	Packaging
ADH9105-20G	High viscosity, black, rubber toughened cyanoacrylate adhesive	20 gram pin cap bottle
ADH9105-50G	High viscosity, black, rubber toughened cyanoacrylate adhesive	50 gram pin cap bottle
ADH9105-500G	High viscosity, black, rubber toughened cyanoacrylate adhesive	500 gram bottle
ADH9480		
ADH9480-50G	Medium viscosity, black, rubber toughened cyanoacrylate adhesive	50 gram pin cap bottle
ADH9455		
ADH9455-200ML	Cyanoacrylate activator	200ml aerosol can
ADH9770		



Part number	Description	Packaging
ADH9770-20ML	Cyanoacrylate primer	20ml bottle with applicator brush cap

Let's start by talking about your application





- Name*
- Company*
- Phone*
- Email*
- Post code*

If you're in the UK, knowing your postcode would help us get in touch even more quickly. If you're outside the UK, please indicate your country.

■ Tell us about your application



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