



EPOXY HIGH STRENGTH ADHESIVES



5M concentrates to a considerable extent on the development and production of adhesives, mainly those that are epoxy based. This range of glues is the most suitable for making joints with excellent mechanical properties and they are used in the construction of aircraft, transport vehicles or sports equipment.

Our product range includes unitary, binary and multi-component adhesives, paste-style or thixotropic adhesives and adhesives in the form of a flexible foil. We are specialists in the development of new types of adhesives in accordance with customers' requirements. Special adhesives for high-strength construction bonding are developed in our own laboratory, where our specialists have at their disposal all of the equipment needed for the development and testing of adhesives.

APPLICATION

- products: sandwich panels with honeycomb/foam structure inside, metal construction parts
- industry: aviation, astronautics, transportation (automotive, rail vehicles, buses), engineering

FOIL EPOXY ADHESIVES

ADVANTAGES

- one-component epoxy foil (film) adhesives
- excellent mechanical properties (possible usage in primary aircraft constructions)
- any hazard vapours
- guaranties equal distribution and optimum thickness of adhesive layer

LIQUID EPOXY ADHESIVES

ADVANTAGES

- curing at room temperature
- high shear and peel strengths, high toughness
- contains corrosion inhibitor and spacer filler



FOIL EPOXY ADHESIVES

Adhesive Letoxit*	Shear strength (20 °C, Mpa)	Peel strength (20 °C, N/mm)	Tg (°C)	Max. temperature resistance (°C)	Typical curing		Colour	Description/Advantages	Roll width/ package per roll
					Temperature (°C)	Time			
KFL 120	36-41	4-7	102	160	120	60 min	grey	extra high strength joints in aviation	250 mm/15 sqm 1000 mm/50 sqm
KFL 120N	36-41	4-7	102	160	120	60 min	grey	high strength	
KFL 125	29-34	3,5-6	102	160	120	60 min	grey	net carrier	
KFL 130	36-41	4-7	105	160	120 (100)	20 (60) min	grey	fast curing	
KFL 131	29-34	2-4	105	160	120 (100)	20 (60) min	grey	fast curing, net carrier	
KFL 156	29-34	2-4	100	160	120 (100)	20 (60) min	grey	gluing of stainless steel	

LIQUID EPOXY ADHESIVES

Adhesive Letoxit*	Viscosity (Pa.s)	Shear strength (MPa)	Peel strength (N/mm)	Tg (°C)	Max. temperature resistance (°C)	Mix ratio (volume)	Mix ratio (weight)	Pot life (min)	Curing temperature (°C)	Manipulation strength (25 °C)	Final strength (25 °C)	Colour	Description	Package
PL 50	pastelike	36	7	50	160	100:43	100:37	60-90 min	20	24 hours	4-5 days*	cyan	structural adhesive for extra strong gluing of metals, composites, wood and glass	1 kg, 5 kg
PL 60	pastelike	35	6	60	-	100:47	100:41	60-90 min	20	24 hours	7 days*	cyan	structural adhesive for extra strong gluing of metals, composites, wood and glass. Improved temperature resistance	200 ml cartridge 1 kg, 5 kg
PL 80	15-20	35	5	80**	-	100:53	100:45	60-90 min	20	24 hours	4 hours/80 °C	cyan	structural adhesive for extra strong gluing of metals, composites, wood and glass. High temperature resistance	200 ml cartridge 1 kg, 5 kg

* could be speed up by heating (at 50 °C final strength in 4 hours, at 120 °C final strength in 1 hour)
** cured at 80 °C

ACCESSORIES

Item	Characteristics	Package
PFL 120	foil adhesive primer	1 l
Xintox	cleaner	manual spray, 500 ml
application gun	for 200 ml 2 comp. cartridges	piece

MATERIALS

Adhesive	aluminium	iron	steel	copper	stainless steel	composites	ABS	PMMA	PVC	PC	PA	PE	PP	wood	ceramics	stone
KFL 120	***	***	***	-	***	***	-	-	-	-	-	-	-	-	***	***
KFL 120N	***	***	***	-	***	***	-	-	-	-	-	-	-	-	***	***
KFL 125	***	***	***	-	***	***	-	-	-	-	-	-	-	-	***	***
KFL 130	***	***	***	-	***	***	-	-	-	-	-	-	-	-	***	***
KFL 131	***	***	***	-	***	***	-	-	-	-	-	-	-	-	***	***
KFL 156	***	***	***	-	***	***	-	-	-	-	-	-	-	-	***	***
Adhesive	aluminium	iron	steel	copper	stainless steel	composites	ABS	PMMA	PVC	PC	PA	PE	PP	wood	ceramics	stone
PL50	***	***	***	-	***	***	***	-	**	-	***	***	***	***	***	***
PL60	***	***	***	-	***	***	***	-	**	-	***	***	***	***	***	***
PL80	***	***	***	-	***	***	***	-	**	-	***	***	***	***	***	***

perfect *** surface treated by corona, laser, plasma, oxidation flame
 good ** surface treated by laser, plasma
 not tested - surface treated by cathodic protection

Please contact us for the recommendation of the best possible surface treatment.

