



TECHNICAL DATA SHEET

ST1626

June 2013

Epoxy adhesive

DESCRIPTION

Maintenance or diverse repairs, metal, glass, wood and plastic bonding, fancy jewels, bonding of decontamination filters.

PROPERTIES

- 2 component room temperature cure liquid epoxy adhesive
- Liquid product suitable for injection
- Unfilled product suitable for transparent assemblies
- Fast setting product adapted to reduce assembly
- Excellent mechanical performances

PHYSICALS PROPERTIES

Composition		RESIN	HARDENER	MIXED
Mix ratio by weight		100	100	
Mix ratio by volume (25°C)		100	100	
Colour		Off-white	Light amber	Light amber
Viscosity à 25°C (mPa.s)	Brookfield LVT	15.000	15.000	15.000
Specific gravity at 25°C	ISO 1675 :1985	1,15	1,15	1,15
Pot life at 25°C on 100 g (min)	Gel Timer TECAM			6
Open (min)				10

THERMAL AND MECHANICAL PROPERTIES (2)

Hardness	ISO 868 : 2003	Shore D1/ D15	80 / 77
Tensile strength	ISO 527 : 1993	MPa	45
Elongation at break	ISO 527 : 1993	%	3
Glass transition temperature (tg)	ISO 11359 : 2002	°C	40
Coefficient of thermal expansion (CTE) (+20 à +50°C)	ISO 11359 : 1999	1 0-6K-1	230
Working temperature	-	°C	-40;+60

EQUIPMENT

ST1626, packaged in 50 ml cartridges and requires a manual or pneumatic gun. Please consult our technical department for applications needing a machine.

SUBSTRATE PREPARATION

ST1626 to be bonded must be free of all dirt, oil or other foreign matter. A clean, dry surface is a must. Consult our Technical Support and refer to the technical data sheet about surface preparations to choose adapted degreaser or cleaner

MECHANICAL PROPERTIES ON ASSEMBLIES (2)

Time to obtain 1 MPa lap shear strength at 25°C	ISO 4587 : 2003	min	15
Time to obtain 50% final lap shear strength at 25°C	ISO 4587 : 2003	min	30
Lap shear strength on aluminium	ISO 4587 : 2003	MPa	27AF(3)
Floating roller peel resistance (2)	ISO 4578 : 1997	kN/m	3 AF
Lap shear strength after moist cataplasms 15 days at 80°C	ISO 4587 : 2003	MPa	20 AF
Lap shear strength after a thermal shock ageing cycle 15 cycles D3 (see annex)	ISO 4587 : 2003	MPa	22 AF
Lap shear strength after ageing in immersion for 3 weeks : motor oil at 70°C hydrochloric acid (0.1 N) at 23°C soda (0.1 N) at 23°C seawater at 23°C gasoil at 23°C gas at 23°C	ISO 4587 : 2003 ISO 175 : 1999	MPa	14 AF 21 AF 22 AF 19
Lap shear strength after thermal ageing 3 weeks at 100°C	ISO 4587 : 2003	MPa	17 AF

(1) Lap shear strength on aluminium 201 7A etched in sulfochromic bath

(2) Hardening conditions: 8 hrs at 80°C + 48 hrs at room temperature

(3) According to ISO 10365:1992 : AF = Adhesive failure

HANDLING PRECAUTIONS

It is recommended to use the product at a temperature between +18°C and +35°C. Normal health and safety precautions should be observed when handling these products :

- ensure good ventilation
- wear gloves and safety glasses
- wear waterproof clothes

For further information, please consult the product safety data sheet.

STORAGE CONDITIONS

Shelf life of ST1626 is 12 months stored in its original unopened packaging at a temperature between +15°C and +25°C.

PACKAGING

ST1626 : 12 cartridges 50mL

GUARANTEE

The information contained in this technical data sheet result from research and tests conducted in our Laboratories under precise conditions. It is the responsibility of the user to determine the suitability of ABchimie products, under their own conditions before commencing with the proposed application. ABchimie guarantee the conformity of their products with their specifications but cannot guarantee the compatibility of a product with any particular application. ABchimie disclaim all responsibility for damage from any incident which results from the use of these products. The responsibility of ABchimie is strictly limited to reimbursement or replacement of products which do not comply with the published specifications.