

Super-X NO. 8008



- ◆ 初期強度及高用圖接着需求適用。
- ◆ 接着不同類型的材質擁有不同膨脹係數適用。
- ◆ 接着需求高耐久性(重複加熱、冷卻與振動性能)。
- ◆ 無添加矽氧烷：不含低分子量環體矽氧烷 (D3 至 D10 環矽氧烷化合物)。

特長

1. 感壓接着劑

- 經由吸收空氣中的濕氣進行固化反應。
- 壓合固定時間約為 10 分鐘。

2. 單液型無溶劑長溫速硬化性

- 容易使用、乾淨與安全。
- 單液型無溶劑成份，可在長溫快速固化。

3. 接着使用範圍廣泛

- Super-X 為彈性接着劑接着基材後不易剝落，由於固化後的薄膜為橡膠態，可以充分地跟隨接着材質膨脹與收縮，所以耐久性的溫度範圍可達-60°C~120°C。

【一般特性】

項目	CLEAR	WHITE	BLACK	L BLACK
主成分	壓克力系變性矽膠樹脂			
外觀	微黃色半透明	白色	黑色	黑色
黏度 (Pa · s/23°C)	83	85	85	22
硬度(SHORE A)	50	43	43	35
Tack free時間 (分)	8	10	10	11
密度 (g/cm ³)	1.07	1.27	1.27	1.25
剪切強度 (N/mm ²)	4.4	4.0	4.0	3.5
破斷伸長量(%)	170	200	200	320
體積抵抗率(Ω · cm)	5.1E+12	3.1E+11	3.1E+11	3.2E+12
彈性率(23°C)	2.5MPa	2.4MPa	2.5MPa	2.1MPa
線性膨脹係數	180 ppm/K	200 ppm/K	200 ppm/K	250 ppm/K
誘電率(100Hz)	4.5	6.4	6.4	6.1
誘電正接(100Hz)	0.3	0.5	0.5	0.3
玻璃轉移溫度(°C)	-58	-60	-60	-61

【各種材料接著性能】

CF：凝集破壞；AF：界面破壞

被接著材	剪切強度(N/mm ²)			
	CLEAR	WHITE	BLACK	L BLACK
鋁 Al	2.89 CF	4.08 CF	4.33 CF	3.45 CF
鋼 SPCC	2.98 CF	3.62 CF	3.62 CF	2.49 CF
壓克力 PMMA	1.37 AF	3.33 CF	3.33 CF	1.21 AF
聚氯乙烯 PVC	2.49 CF	3.12 CF	3.12 CF	2.23 CF5AF5
耐隆 Nylon	1.88 CF	2.99 CF	2.99 CF	1.39 CF5AF5
聚碳酸酯 PC	2.45 CF	3.48 CF	3.48 CF	2.14 CF9AF1

※ 23°C50%RH×7日間養生

※ 塗布量：雙面塗布、片面100µm



Super-X Series

Super-X No.8008



勝特力材料 886-3-5753170
勝特力电子(上海) 86-21-34970699
勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

Cemedine Super-X is an epoch-making one-part quick curing adhesive having three significant features which are said to be ideal properties of the adhesives; "pressure-sensitive adhesion", "elastic adhesion" and "solventless adhesion".

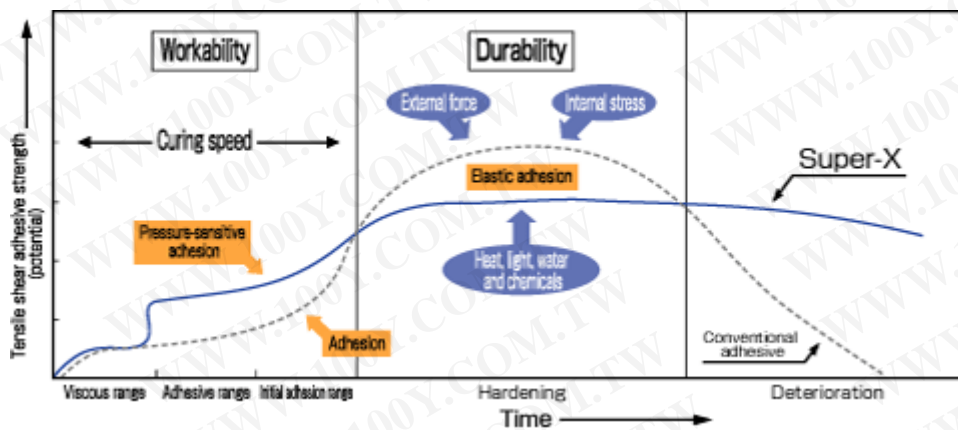
Features

1. Pressure-sensitive adhesion	Curing reaction is caused by moisture absorbed from the air. Pressure-sensitive range is reached in this curing process about 10 min. after application. If adherends are put together during this time, they bound instantaneously as in the case of rubber contact adhesive, eliminating the need for temporary fixation.
2. One-part solventless agent providing quick curing at normal temperature	Easy-to-use, safe, and clean adhesive featuring one-part solventless agent capable of quick curing at normal temperature is provided.
3. Adhesive property over an extensive range	Super-X products allow for adhesion of various types of plastics, rubbers and ceramics over an extensive range, moreover different types of metals. These products provides excellent adhesion over a very extensive range of materials, eliminating the need for selecting a particular adhesive for each type of the different materials, as in the case of conventional agents.

4. Durability

The Super-X as elastic adhesives do not peel off. Once materials are adhered, the Super-X provides durability in the range from low temperature (-60°C) to high temperature (120°C). Because of the rubber state of the hard film, the Super-X follows the changes of adherents such as expansion and shrinkage sufficiently.

Super-X conceptual diagram



Application

- Adhesion required to have initial adhesive strength

- Adhesion of different types of materials having different thermal expansion coefficients

- Adhesion required to have durability due to repeated heating, cooling and vibration

- Electrical contact failure countermeasure product

Adhesive strength for various types of adherends

Classification	Adherend	Tensile shear adhesive strength after 7-day curing (N/mm ²)	
		Open time, 3 min.	Open time, 25 min.

Metal	Steel plate (SPCC, SPCD)	3.92	3.92
	Aluminum (*1)	4.21	4.12
	Stainless steel	4.21	3.92
	Copper	4.51	4.21
Plastics	Polycarbonate	4.31	3.23
	Bakelite	4.21	54.02
	ABS	2.45	1.96
	Plasticized polyvinylchloride	3.92	3.14
	Styrene	2.74	2.25
	Acryl	2.94	2.16
	6-nylon	2.84	2.65
	FRP (*2)	4.02	2.94
	Polyethylene foam (*3)	0.98	-
	Polypropylene (*4)	2.45	-
	PEEK (polyether ketone)	3.14	-
	PES (polyether sulfone)	3.82	-
	PSF (polysulfone)	3.53	-
	PET (polyethyleneterephthlate)	1.67	-
	PPS (polyphenylene sulfide)	3.72	-
	PPO (polyphenylene oxide)	4.41	-
	PAR (polyarylate)	4.12	-
	Oxybenzoyl polyester	2.25	-
Others	Slate	1.86	1.67
	Plywood	2.65	3.14

Conditions: Coated on both sides, 50µm thick (one side), tension speed between adherends: 50mm/min.

Note:

*1 and *2: Surface preparation will cause adhesive strength to become uneven; it must be confirmed in advance.

*3: Surface preparation by exposure to ultraviolet ray.

*4: Primer (Cemedine PP-5) to be used.

Adhesive strength for various types of rubbers

Classification	Adherent	Peeling adhesive strength after 7-day curing (N/mm)
Rubber	Natural rubber	0.88 Substrate failure
	NBR	2.36 Cohesion failure
	Silicone rubber	0.84 Substrate failure
	SBR	2.36 Substrate failure
	EPDM	0.80 Adhesion failure
	EPDM (*)	2.36 Cohesion failure
	Chloroprene rubber (CR) (*)	0.72 Adhesion failure
	CSM (chlorosulfuric oilyethylene) (*)	0.56 Adhesion failure

(*): Degreasing by toluene after treatment by sand paper (#120).

Chemicals resistance

Chemicals	Tensile shear strength after dipping in chemicals (N/mm ²)
Unprepared	4.31
Water	3.63
Acetic acid (1% water solution)	3.72
Acetic acid (10% water solution)	1.96
Sulfuric acid (3% water solution)	4.41
Sulfuric acid (30% water solution)	4.02
Sodium hydroxide (1% water solution)	4.41

Sodium hydroxide (10% water solution)	4.51
Machine oil (Idemitsu: Mechanic Oil)	4.21
Salt (10% water solution)	4.31
Methylethylketone (*)	0.29
n-hexane (*)	0.78

(Conditions): Coated on both sides, 50 μ m thick (one side), open time 3 min.

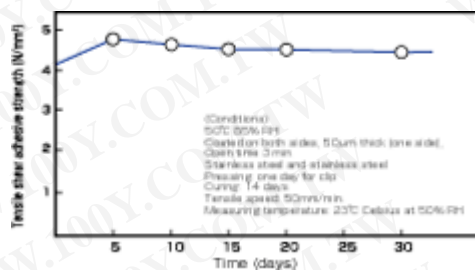
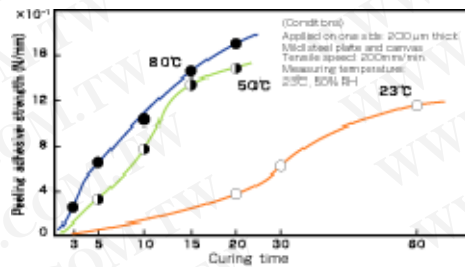
Stainless steel and stainless steel Pressing: one day for clip Curing: 7 days

Number of days to be dipped in chemicals: 7 Tensile speed: 50mm/min.

* Deterioration of solvent is observed, but no problem with short-time contact, for example, in washing.

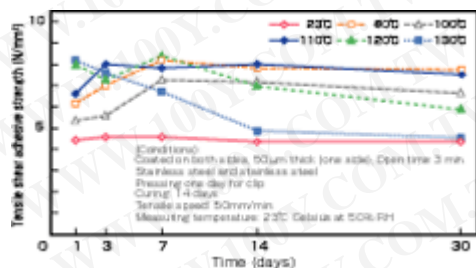
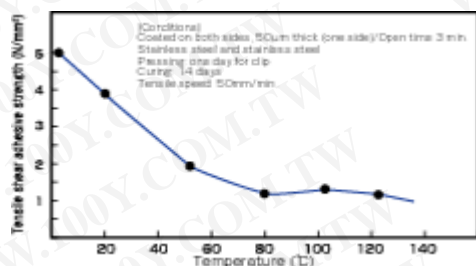
Initial curing speed

Tensile shear adhesive strength, after repeated heating and cooling








Tensile shear strength on each temp

Tensile shear adhesive strength after heat aging



List of Super X Adhesives

Product name	Super X No.8008 (RoHS)	Super X No.8008 black (RoHS)	Super X No.8008 clear (RoHS)	Super X No.8008 Lblack (RoHS)	Super X No.8008 LLblack (RoHS)
Main component	Special polymer containing silyl group	Special polymer containing silyl group	Special polymer containing silyl group	Special polymer containing silyl group	Special polymer containing silyl group
Appearance	White paste	Black paste	Light yellow translucent paste	Black paste	Black paste
Viscosity (Pa · s/23°C)	90	90	65	24	14
Specific gravity (g/cm ³)	1.26	1.26	1.07	1.24	1.21
Tack free time	11	11	8	11	11
Tensile shear adhesive strength (N/mm ²)	3.7	3.7	3.4	3.2	2.9
T type peeling adhesive strength (N/mm)	2.5	2.5	1.7	2.4	1.8
Curing					
Hardness	48	48	49	39	3.4

properties	(Shore A)					
	Glass transfer point (°C)	-63	-63	-64	-68	-61
	Breaking strength (N/ mm ²)	1.8	1.8	1.6	0.9	0.7
	Breaking extension (%)	220	220	150	300	275
	Linear expansion coefficient	2.1×10 ⁻⁴	2.1×10 ⁻⁴	1.8×10 ⁻⁴	2.4×10 ⁻⁴	3.6×10 ⁻⁴
Electric characteristics	Volume resistivity (Ω · cm)	1.1×10 ¹²	4.7×10 ¹¹	1.3×10 ¹²	1.2×10 ¹²	1.0×10 ¹²
	Dielectric constant (100Hz)	6.15	7.07	3.89	6.99	6.56
	Dielectric loss tangent (100Hz)	0.22	0.34	0.11	0.24	0.25
Formaldehyde grade						
Capacity standards		170g 333ml	170g 333ml	333ml	170g 333ml	333ml

Adhesive for electrical components SX720 (W, WH, B, and BH)



1. Nonflammable product (UL94V-0 listed). (File No.E178790)
2. One-part elastic adhesive capable of curing at normal temperature and humidity.
3. Quick initial adhesion, high tack power for various types of materials, and excellent durability.
4. Safe and global environment-friendly adhesive.
5. Electrical contact failure countermeasure product.

- Contains no low molecular siloxane component.
- Employs no halogen-based, antimony oxide, or phosphorus-based materials.
- Employs no volatile solvents.

Application

• Fixing of circuit boards such as condenser and coil

• Sealing of power supply and transformer for insulation

• Sealing of electronic components for waterproofing

List of SX720 Adhesives

Product name	SX720W (RoHS)	SX720WH (RoHS)	SX720B (RoHS)	SX720BH (RoHS)
Main component	Special polymer containing silyl group	Special polymer containing silyl group	Special polymer containing silyl group	Special polymer containing silyl group
External appearance	White paste	White paste	Black paste	Black paste

Viscosity (Pa · s/23°C)		45	85	45	85
Specific gravity (g/cm ³)		1.56	1.57	1.56	1.57
Tack free time		10	8	10	8
Tensile shear adhesive strength (N/mm ²)		3.4	3.2	3.4	3.2
T type peeling adhesive strength (N/mm)		1.0	1.0	1.0	1.0
Curing properties	Hardness (Shore A)	78	81	78	82
	Glass transfer point (°C)	-64	-69	-63	-69
	Breaking strength (N/mm ²)	3.4	3.2	3.4	3.2
	Breaking extension (%)	100	50	100	50
	Linear expansion coefficient	1.1×10^{-4}	7.3×10^{-5}	8.7×10^{-5}	8.1×10^{-5}
Electric characteristics	Volume resistivity (Ω · cm)	2.1×10^{12}	1.7×10^{12}	2.3×10^{12}	1.4×10^{12}
	Dielectric constant (100Hz)	6.2	5.9	6.6	6.2
	Dielectric loss tangent (100Hz)	0.23	0.31	0.27	0.28

Thermal conductivity (W/m · k)	0.91	0.92	1.09	1.00
Capacity standards	200g 333ml	200g 333ml	200g 333ml	200g 333ml