



导电银胶 -A2b / H2b

A2b / H2b为两液型网印低温压合导电银胶。A2b为主剂，H2b为硬化剂。应用于电子元件之电性联结。它在混合、网印、预烘之后，即会呈现一略带黏性的表面，方便电子元件之对位及暂时固定，之后以热压完成电子元件之电性联结。

使用时，主剂与硬化剂必须预先混合均匀，建议以慢速旋转式油墨搅拌机混合 混合均匀与否对于最终接着性极为重要，切勿等闲视之。之后以 120 mesh (48T)之丝网印刷于接着基材之一面，在经过100 ° C x 20-30分钟之烘烤 (Baking)后，会产生干燥但稍具沾黏性的表面。可应用于随后的对位及热压合，热压合建议以90 ° C x 5-10秒钟操作。

热压后，树脂仍会缓慢而持续的进行分子键结反应，使得其接着强度可逐渐增加。

此产品符合RoHS & Halogen-free规范，且不含PFOS & PFOA。

产品规格

粘度	5 ± 1 Pa.s @ 10 ³ s ⁻¹ ; Cone & plate Rheometer
摇变值	3.5 ± 0.5
颜色	银色
固成份	87±1%
主剂：硬化剂	97：3
比重	3.3 ± 0.1
网版	120 mesh (48T) silk-screen
混合后使用期限	8 小时
烘烤 (Baking)	100°C x 20-30 分钟 ; or 120°C x 10-15 分钟
热压	90°C x 5-10 秒钟
产品保存期限	制造后 12 个月

1. 混合后搅拌



Photo 1. 主剂与硬化剂混合后，以小型均质分散机械搅拌均匀。

2. 网印



Photo 2. 以 120 mesh (48T) 丝网印刷

3. 烘烤



Photo 3. 以100 ° C x 20-25分钟烘烤

4. 热压

90°C x 10 seconds

A2b 物性

测试	结果	测试规范
Contact resistance	< 1 Ω	Hot-bar @ 90°C x 10 seconds Contact area = 5 mm x 5 mm
Peel strength	> 0.7 kg/cm	90°-peel Adhesive @ 20 μ m; Cu to Cu
Thermal aging @ 90°C x 240 hours	Average contact resistance < 1 Ω	120-mesh (48T) silk-screen Hot-bar @ 90°C x 10 seconds
Solder reflow resistance @ 300°C x 5 minutes	Average contact resistance < 1 Ω	Hot-bar @ 90°C x 10 seconds Post-cured @ 150°C x 30 minutes
Thermal shock	Average contact resistance < 1 Ω	[90°C-1hr \leftrightarrow -15°C x 1hr] for 3 cycles
Water resistance	Average contact resistance < 1 Ω	In water @ 60°C x 4 hours
Moisture absorption	< 0.1%	IPC-TM-650 2.6.2.1

Material Safety Data Sheet

Teamchem Company

Date of issue: August 10, 2009

Product Identity

Trade name: A2b / H2b

1. Identification of the product and of the company.

Product name: A2b / H2b

Company name: Teamchem Company

Address: No.14, Lane 276, Yongfeng Rd.,
Barder City, Taoyuan County, Taiwan, R.O.C. 334

Emergency phone: +886-3375-8654

Preparer: Todd Yeh

2. Composition/information on ingredients

<u>Ingredient Name</u>	<u>CAS Number</u>	<u>Percent</u>
Modified epoxy resin	Trade secret	<34
Hardener	Trade secret	<3
Dipropylene Glycol Monomethyl Ether	35490-94-8	<15
Silver particles	7440-02-0	<55
Misc. additives	Trade secret	<2

All ingredients comply with applicable rules or orders under TSCA.

Weight percents listed above are within 5% of the actual value.

3. Hazards identification

Emergency Overview:

Liquid; skin irritant

Potential Health Effects:

INHALATION: may cause irritation

EYE CONTACT: may cause irritation

SKIN CONTACT: may cause irritation

INGESTION: maybe harmful

4. First aid measures

Eye contact:

Rinse eyes with running water for 15 minutes. Consult a doctor.

Skin contact:

Wash promptly exposed areas with soap and water.

Inhalation of aerosol / vapor / dust:

Remove victim to fresh air immediately.

Ingestion or accident:

Get medical attention promptly. If swallowed, seek medical advice immediately

5. Fire fighting measures

Extinguishing media:

Dry chemical, CO₂, foam, water spray

Special advice in case of fire:

Firefighters should wear self-contained breathing apparatus and eye protection in fighting significant fires in which this material is involved.

6. Accidental release measures

After spillage, soak it up with rags or paper towels and dispose it according to local regulations.

Avoid breathing vapors and remove ignition sources.

7. Handling and storage

Handling:

Avoid contact with skin and eyes. Wear protective goggles, aprons etc...

Storage:

It should be stored in a cool, dry, well-ventilated location.

8. Exposure controls and personal protection

Personal protective equipment

Respiratory: Industrial canister gas masks
Eye protection: Face shields
Hand, skin and body protection: Wear impervious clothing, chemical-resistant gloves, apron and impervious boots.

9. Physical and chemical properties

*Flash point: >100°C (Seta flash Closed Cup)
*Viscosity: 5~15Pa.s at 25°C
*Solubility in water: insoluble

10. Stability and reactivity

Stability:

This product is stable under ambient condition.

Conditions to avoid:

Heat, sunlight.

Materials to avoid:

Acids, alkalines, amines, peroxides, oxidizing agents.

11. Toxicological information

<u>Species</u>	<u>Route</u>	<u>Exposure and Dose</u>
Modified epoxy resin	oral-rat	LD50>4,000 mg/kg
Dipropylene Glycol Monomethyl Ether	oral-rat	LD50>4,000 mg/kg
Hardener	oral-rat	LD50>10,000 mg/kg

12. Ecological information

No data

13. Disposal considerations

*Local regulations should be adhered to.

*Disposal of empty containers.

14. Transport information

General information: Keep container tightly sealed.
 Load and unload with care.
UN harmful class: None
UN package category: None

15. Regulatory information

Follow all regulations in your country.

Symbol(s) Harmful in contact with skin
 Harmful if swallowed
 Irritating to eyes

Safety-phrase(s) Avoid contact with skin
 Avoid contact with eyes
 In case of contact with eyes, rinses immediately with plenty of
 water and seek medical advice.
 Take off immediately all contaminated clothing
 Wear suitable glove
 In case of insufficient ventilation, wear suitable respiratory
 equipment
 Wear eye / face protection

16. Other information

Product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with legal regulation.

The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should therefore not be construed as guaranteeing specific properties.