

# EMSD-526A&B

## 导热型有机硅电子灌封胶

### 产品特征

EMSD-526A&B 是一种有机硅加成型灌封胶。本产品由 A, B 双组分构成, 当 A 和 B 组分以 1: 1 比例混合后, 逐渐固化形成有机硅弹性体。产品在室温下就可以固化, 当加热时, 可以使固化速度加快。该产品有较好的阻燃性和热导率, 更适合于工作状态下发热的电子元器件的灌封。

### 产品参数

固化前	
外观	A组分 黑色 B组分 白色
粘度, cP	A组分 <4500 B组分 <4500
比重, g/cm <sup>3</sup>	1.57
配比 1:1	操作方便, 误差小

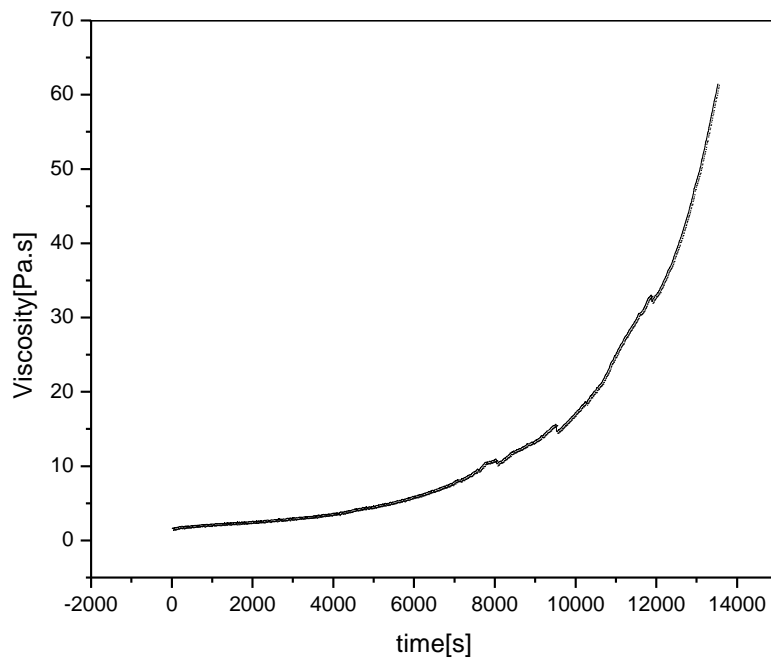
固化 (EMSD-526A&B 组分混合之后就开始固化)	
工作时间, 分钟	40
起始粘度, cP	<4500
常温 (25 °C) 固化时间, 小时	8-16
加热 (70 °C) 固化时间, 分钟	<30

固化后	
比重, g/cm <sup>3</sup>	1.57
硬度 (邵氏A)	60
10% 延伸时的模量, MPa	0.3
拉伸强度, MPa	2.6
断裂伸长率, %	70
热导率, W/mK	0.6
体积电阻率, Ω . cm	$5.7 \times 10^{14}$
介电常数	2.9
介质损耗角正切	$1.4 \times 10^{-3}$
绝缘强度, kV/mm	16
适用温度, °C	-55 到 220
CTE, ppm/°C	<250
阻燃等级	UL94V0 (E340343)
环保认证	RoHS

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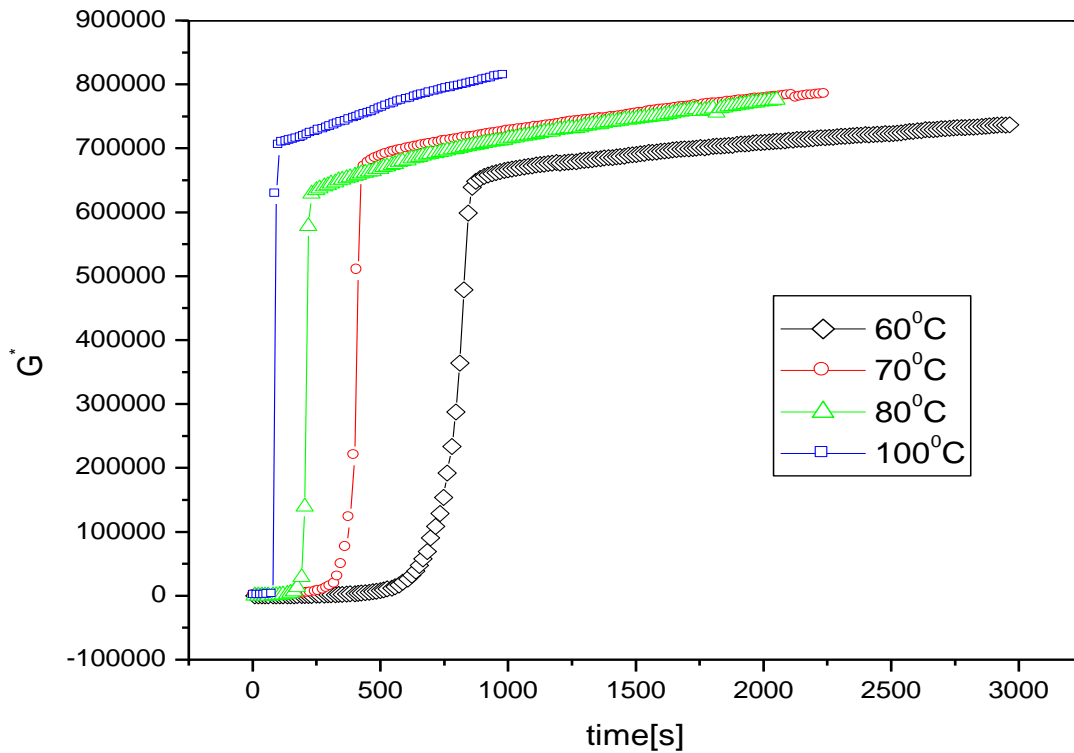
时间 (min)	粘度 (Pa. s)	时间 (min)	粘度 (Pa. s)
0	1.53	40	2.70
5	1.82	50	2.98
8	1.95	60	3.40
10	2.07	80	4.48
15	2.15	100	5.95
20	2.25	130	10.54
25	2.36	160	14.97
30	2.44	200	33.12
35	2.56	225	61.00

在 25 °C 温度下，EMSD-526A&B 混合后的粘度变化



25 °C 温度下，EMSD-526A&B 混合后的粘度变化曲线（ARES 流变仪，25mm 直径 parallel plates，dynamic time sweep at 40 rad/s）

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EMSD-526A&B 在不同温度下的流变图谱 (ARES 流变仪, 25mm 直径 parallel plates, dynamic time sweep at 1 Hz 1 radius)

Temperature (°C)	Time to cure
10	2-3 days
25	8-16 hours
60	14 minutes
70	7 minutes
80	4 minutes
100	2 minutes

### EMSD - 526 A & B 不同温度下固化总结

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## 使用说明

1. 所有的基材表面必须干净和干燥，没有灰尘和油腻以及其他任何影响产品正常固化和粘结的物质。
2. 将 A, B 组分打开包装，搅拌预混后，按 1: 1 的重量比称取。
3. 将按比例配好的 AB 组分充分混合，真空脱气后，立即灌入需要灌封保护的电子器件中。
4. 让灌封胶在室温环境下，或加温的环境下固化。
5. 未经混合的灌封胶一旦包装开封后，建议尽早使用完毕。如有剩余，需密闭储存，尽量减少与空气中水分的接触。

## 注意事项

- A. 混合后的硅胶在 25 °C 下只有大约 40 分钟的工作时间。超过 40 分钟，硅胶可能过稠甚至固化，导致无法灌封。
- B. 灌入元件的硅胶其完全固化时间根据温度有较大差异，  
25 °C 需要 8-16 小时  
70 °C 只需要 0.2 小时  
10 °C 可能需要 2-3 天
- C. 有些化学物质可能影响硅胶中的催化剂，导致固化时间增长或无法固化。比如：含硫的化合物，含胺基的有机物，烯烃或炔烃等等。

## 储存与产品保质期

未经开封的 EMSD-526A&B 产品可以在 30°C 以下的条件下 12 个月存储。产品一旦开封应当尽早使用完。

## 安全

请参考本产品的材料安全数据表。

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