

# ALPHA<sup>®</sup> WS-698 助焊膏

半导体应用的水溶性、高活性助焊膏

## 概述

**ALPHA WS-698** 是一款专为将各种无铅及锡铅共晶合金焊接到面阵封装上而开发的水溶性助焊膏。并与铜-OSP、电解镍-金和 ENIG 焊盘表面处理具有出色的兼容性。

**ALPHA WS-698** 助焊膏符合无卤素标准，具有卓越的助焊活性，可改善润湿性与铺展性，并降低缺球率/提高良率。由于其助焊活性高，不建议将其用作清洗基板和电路板的预清洗助焊剂。

请在使用本产品前详细阅读技术数据说明书

## 特性与优点

- **性能特点：**具有卓越的润湿性，可以提高组装良率，从而实现上佳的球粘接和倒装芯片良率。
- **优异的稳定性：**在多个印刷循环中保持粘性和粘度（无需补充下,长达 8 小时）。
- **卓越的可清洗性：**具有优异的可清洗性，残留物可用去离子水轻松清除。
- **环保配方：**无卤素。

## 技术规格

属性	典型值	规程/备注
活性水平（J-STD 分类）	ORH0	IPC-J-STD-004
铜腐蚀测试（清洗后）	合格，无腐蚀迹象	IPC-J-STD-004
pH 值（5%溶液）	3~6	IPC-TM-650 pH 计
外观	浅琥珀色、光滑	ASP-WI-QC-009FS
粘着强度（时间-0）	> 140 gF	IRC-SOP-CSP 0011
粘度（10rpm）	250~550 泊	GLB-AMG-STM00541
表面绝缘电阻（IPC 7 天，85 °C/85%相对湿度）	合格，> 1.9 x 10 <sup>10</sup> Ω	IPC-TM-650 (2.6.3.3)
包装规格	150g 针筒装，30g 针管装	-

如需其他包装规格或有其他要求，请联系您当地的麦德美爱法销售办事处。

### 应用指南

**ALPHA WS-698** 助焊膏常用于印刷、球浸渍应用，并兼容针头转移。适用于 BGA/CSP 和倒装芯片等组件。应用范围包括但不限于球粘接和倒装芯片贴装工艺。

如有其他应用要求，请联系您当地的麦德美爱法销售办事处。

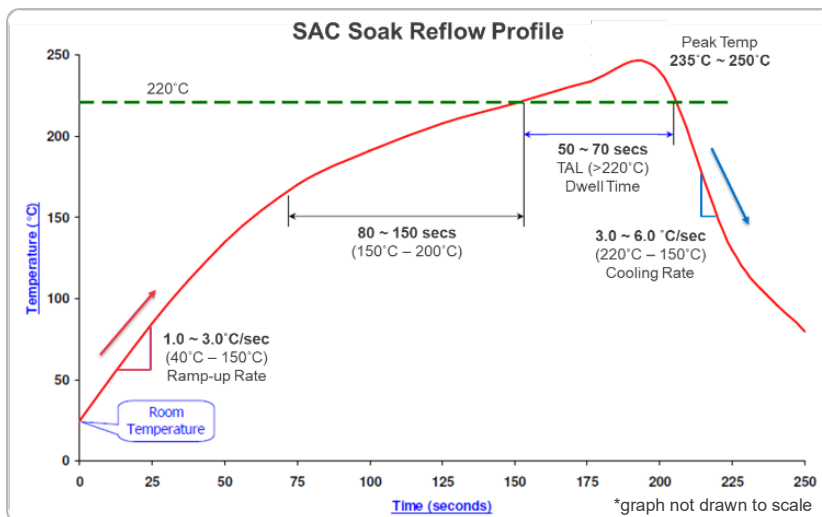
### 处理指南

#### 存储条件：

- 存放在密封容器中（15~25 ° C），无需冷藏。
- 未开封容器的保质期自生产日期起为 6 个月。

#### 建议的回流曲线：

- 回流环境：在氮气控制环境下进行，推荐带氧气浓度为 $\leq 100$  ppm。
- 初始升温速率：以 1.0~3.0 ° C/秒的速率升至峰值温度。
- 保温：150~200 ° C，保持 80~150 秒。
- 熔点以上停留时间：不应超过 50~70 秒。
- 冷却速率：以 3.0~6.0 ° C/秒的速率降至室温。



注：回流指南仅为建议和基准参数，可能需要根据组件热曲线、器件封装设计、助焊剂特性、烤箱校准及环境条件进行调整。

关于其他清洗及回流参数，请联系您当地的麦德美爱法销售办事处。

**回流后清洗:**

- 使用 55~60 ° C 的去离子水清除残留物，喷射压力为 35~60 psi（适用于球粘接）或 50~60 psi（适用于倒装芯片）。
- 如有必要，可使用清洗剂清除助焊剂残留物。
- 为获得优异效果，请遵循市售清洗剂附带的清洁说明。

**安全 & 警告**

建议贵公司及产线操作员工在使用产品之前阅读并回顾产品安全技术说明书中关于健康和警告部分。**相关产品安全技术说明书可提供。**

**联系信息**

[www.macdermidalpha.com](http://www.macdermidalpha.com)

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Also read carefully warning and safety information on the Safety Data Sheet. This data sheet contains technical information required for safe and economical operation of this product. READ IT THOROUGHLY PRIOR TO PRODUCT USE. Emergency safety directory assistance: US 1 202 464 2554, Europe + 44 1235 239 670, Asia + 65 3158 1074, Brazil 0800 707 7022 and 0800 172 020, Mexico 01800 002 1400 and (55) 5559 1588

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