



# MATERIAL SAFETY DATA SHEET

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION				
<b>Trade Name (As Labeled):</b>	SolderQuik CCMD and CGA Prefoms			
<b>Manufacturer:</b>	Winslow Automation, Inc.			
<b>Address:</b>	905 Montague Expressway Milpitas, CA 95035			
<b>Information Telephone:</b>	(408) 262-9004			
<b>Telephone (Emergency):</b>	(408) 313-5618			
<b>Chemical Name:</b>	Not Applicable			
<b>Chemical Formula:</b>	Not Applicable, Mixture			
<b>Product Description:</b>	This product is designed to join a leadless ceramic chip carrier (LCC) to corresponding solder lands on a printed wiring board (PWB).			
<b>Date Prepared: (Revised)</b>	March 25, 2003			
SECTION 2 – HAZARDOUS AND NON-HAZARDOUS INGREDIENTS				
<b>Note:</b> Product under normal conditions does not represent an inhalation, ingestion or contact health hazard. *The weight percent of Lead and Tin varies depending on paper size and pin size.				
Hazardous Ingredients	C.A.S. Number	Weight %	OSHA PEL	ACGIH TLV
Lead (Pb)	7439-92-1	* 30-40	0.05 mg/m <sup>3</sup>	0.15 mg/m <sup>3</sup>
Antimony (Sb)	7440-36-0	<1	0.5 mg/m <sup>3</sup>	0.5 mg/m <sup>3</sup>
Tin (Sn)	7440-31-5	* 7-10	2.0 mg/m <sup>3</sup>	2.0 mg/m <sup>3</sup>
Non-Hazardous Ingredients				
POLYOX Water Soluble Resin, Dissolvable Paper	N/A	50 - 62	N/A	N/A
SECTION 3 – PHYSICAL/CHEMICAL CHARACTERISTICS				
<b>Boiling Point:</b> (A 760 mm Hg)	Not Applicable			
<b>Evaporation Rate:</b> (Butyl Acetate = 1)	Not Applicable			
<b>Solubility in Water:</b>	None			
<b>Specific Gravity:</b> (H <sub>2</sub> O – 1)	Not Applicable			
<b>Volatile Organic Compounds:</b> (VOC)	Not Applicable			
<b>Percent Volatile:</b> (by Volume)	Not Applicable			
<b>Vapor Density:</b> (Air = 1):	Not Applicable			
<b>Vapor Pressure:</b> (mm Hg):	Not Applicable			
<b>Appearance and Odor:</b>	Paper wafer with small solder posts around perimeter.			
<b>pH:</b> (10% Solution)	Not Applicable			
<b>Melting Point:</b>	Not Applicable			



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SECTION 4 – FIRE AND EXPLOSION HAZARD DATA		
<b>Flash Point (T.O.C):</b>	Not Applicable	
<b>Flammable Limits (in air):</b>	Not Applicable	
<b>Extinguishing Media:</b>	CO <sub>2</sub> , Dry Chemical, Foam	
<b>Special Fire Fighting Procedures:</b>	Toxic fumes may be involved in a fire. Firemen should wear SCBA gear in enclosed areas.	
<b>Unusual Fire and Explosion Hazards:</b>	None Known	
<b>Auto-Ignition Temperature:</b>	Not Applicable	
SECTION 5 - REACTIVITY DATA		
<b>Stability:</b>	Stable	
<b>Conditions to Avoid:</b>	Humidity and water will degrade the product.	
<b>Incompatibility:</b>	Strong acids, strong oxidizers.	
<b>Thermal Degradation Products:</b>	Thermal degradation is not significant at temperature achieved during proper installation, as directed by product installation guide. Thermal degradation products may include, but are not limited to, carbon monoxide, carbon dioxide, oligomers of ethylene glycol and glycerol. At temperatures greater than 1000 <sup>0</sup> F (537 <sup>0</sup> C) oxides of lead, antimony, and tin may be released. These combustion byproducts are toxic and should not be inhaled.	
<b>Hazardous Polymerization:</b>	Will not occur.	
SECTION 6 - HEALTH HAZARDS / ROUTE(S) OF ENTRY		
<b>Note:</b> Product under normal conditions does not represent an inhalation, ingestion or contact health hazard. However, soldering may release fumes and/or dust which may present health hazards if TLV is exceeded.		
<b>Primary Routes of Entry:</b>	Skin, Inhalation	
<b>Effects of Acute (severe short term) exposure:</b>	Inhalation:	Thermal degradation and combustion byproducts may be toxic and should not be inhaled.
	Skin Contact:	This product is not expected to be a skin irritant.
	Eye Contact:	Contact with molten material may cause thermal burns.
	Ingestion:	In the unlikely event that exposure should occur, ingestion of excessive quantities of metals may cause anemia, sleep disturbances, weakness, irritation of the digestive tract.



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## SECTION 6 - HEALTH HAZARDS / ROUTE(S) OF ENTRY cont.

<b>Effects of Chronic (prolonged) exposure:</b>	Inorganic lead is a component of the solder in this product, and is listed by IARC as a suspect carcinogen. Lead is known to cause birth defects. Prolonged or repeated overexposure to lead may cause damage to the male and female reproductive system. Persons with pre-existing reproductive disorders may be more susceptible to the effects from lead exposure.
<b>Medical Conditions Generally Aggravated by Exposure:</b>	Solder inserts contain lead. No significant emission of lead is expected during normal conditions of use. Overexposure to lead can result in serious health effects.
<b>Carcinogenicity:</b>	This product contains lead, which is known to the State of California to cause cancer, birth defects or other reproductive harm. This warning is provided in accordance with the provisions of California Health & Safety Code 252496.6.
<b>Signs and Symptoms of Exposure:</b>	Headache, nausea, dizziness and drowsiness.

## SECTION 7 - EMERGENCY FIRST AID

<b>Eye Contact:</b>	If eye irritation occurs, flush affected eye(s) immediately with clean water for 15 minutes. Seek medical attention.
<b>Skin Contact:</b>	First aid is not normally required. After handling product, it is a good work practice to wash your hands. If molten material contacts skin, cool area immediately with water. DO NOT attempt to remove material from the skin. Treat as a burn and seek medical attention.
<b>Inhalation:</b>	If respiratory symptoms or other symptoms of exposure develop, move victim to fresh air. If symptoms persist, seek medical attention.
<b>Ingestion:</b>	Not a normal route of exposure. However, if swallowed and symptoms develop, seek medical attention.

## SECTION 8 – PRECAUTIONS FOR SAFE HANDLING AND USE

<b>Steps to be Taken if Material is Spilled or Released.</b>	Material is not in liquid form and cannot be spilled. If lead inserts are released, handle according to proper waste disposal methods.
<b>Waste Disposal Method:</b>	This product is considered a toxic hazardous waste in accordance with U.S. EPA regulations. Solder can be reclaimed. Classification according to all local and state hazardous waste regulations is required before disposal.
	EPA Hazardous Waste No: D008
	Hazard Class: 9, Miscellaneous

## SECTION 8 – PRECAUTIONS FOR SAFE HANDLING AND USE cont.

<b>Empty Containers:</b>	Not Applicable.
<b>Precautions to be taken in handling and storage:</b>	Store in a dry, cool space.



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<b>Hazardous Decomposition Products:</b>	None.
<b>Hazardous Polymerization:</b>	Will not occur.
<b>SECTION 9 - SPECIAL PROTECTION INFORMATION</b>	
<b>Respiratory Protection:</b>	Not normally needed. Seek professional advice prior to respirator selection and use.
<b>Ventilation:</b>	In accordance with good industrial hygiene practice, ensure adequate ventilation during use.
<b>Protective Clothing/Equipment:</b>	Use eyewear to prevent contact, as appropriate to the given operator. If there is a danger of molten material contacting the skin or eyes, use eye/face protection and heat-resistant gloves.
<b>Hygienic Work Practices:</b>	Do not eat, drink or smoke in the immediate work area. Wash hands before eating, drinking or smoking.
<b>SECTION 10 – ADDITIONAL INFORMATION</b>	
<b>TSCA Status:</b>	Ingredients in this product are reported in the EPA TSCA inventory, 1980.
<b>Department of Transportation:</b>	Hazardous Waste Solid, n.o.s., Class 9, NA3077, PGIII
<b>SARA Status:</b>	This Chemical is subject to the reporting requirements of Section 313, Title III.
<b>California Proposition 65</b>	This product may contain levels of LEAD known to the State of California to cause cancer, birth defects or other reproductive harm.

This information is supplied in accordance with OSHA Hazard Communication Standard (29CFR1910.1200). Users are advised to ensure that this information is brought to the attention of the employees, agents, or contractors handling this product. Distributors of this product are advised to forward this document, or the information contained herein, to their purchasers. Winslow Automation makes no warranties as to its accuracy or completeness and disclaims any liability in connection with its use.

Users of Winslow Automation's products should make their own evaluation to determine the suitability of each product for specific application and to establish safe handling and installation procedures.