



MATERIAL SAFETY DATA SHEET

For Welding Consumables and Related Products
Conforms to OSHA Hazard Communication Standard
29CFR 1910.1200
Standard Must Be Consulted for Specific Requirements

U.S. ALLOY CO.
dba Washington Alloy
7010-G Reames Rd.
Charlotte, NC 28216
www.weldingwire.com

MSDS NO: Solder Kits
REVISED 7-2008



SECTION I -- IDENTIFICATION

Manufacturer/Supplier: Washington Alloy Company
Address: 7010 -G Reames Road , Charlotte, NC 28216

Telephone No: 704-598-1325
Emergency No: 704-598-1325

Trade Name: Superflow USA 96/4 Kit
Superflow USA 780 Kit

Family: Soft solder alloy

SECTION II - COMPOSITION INFORMATION for 4 items

Components	CAS Number	%	OSHA PEL
96/4 Solder Wire			
Tin	7440-31-5	Balance	2.0 mg/ m ³
Silver ⁽¹⁾	7440-22-4	3.0-5.0	0.01 mg/ m ³
96/4 Flux			
Ammonium Chloride	12125-02-9	4-15	NA
Hydrochloric Acid	7647-01-0	3-15	5PPM
Zinc Chloride	7646-85-7	30-45	1PPM
780 Solder Wire			
Aluminum	7429-90-5	Balance	10.0 mg/ m ³
Zinc	7440-66-6	1.5-3	10.0 mg/ m ³
780 Flux			
Cesium / Aluminum Fluoride Compounds	138577	> 65 %	2.0 mg/m ³

Unlisted percentages are non-hazardous stabilizers, activators, and water. None of the materials in this product are listed in NTP, IARC, or OSHA as Carcinogens. NIOSH classifies brazing fumes as a possible carcinogen. Threshold limit Value for brazing is 5 mg/m³

SECTION III - HEALTH HAZARDS

EMERGENCY AND FIRST AID PROCEDURES

- Inhalation:** Remove to Fresh Air or Administer Oxygen. Call Physician.
- Eyes:** Flush with Water for 15 Minutes. Call Physician.
- Skin:** Wash Thoroughly with Water.
- Ingestion:** If Patient is Fully Conscious, Rinse Mouth.
Obtain Medical Attention Immediately.

Primary Routes of Entry into Body: Fume Inhalation, Ingestion, Skin, and Eyes.

Symptoms of Overexposure: Irritation or dryness of the nose and throat, Salivation, Coughing, Choking, Chills, headache, thirstiness and tiredness. Molten alloy may burn on contact.

Medical Conditions Generally Aggravated by Exposure: Respiratory, Skin disorders

Chemical Listed as Carcinogen or Potential Carcinogen: None

OSHA Permissible Exposure Limit (PEL): 0.01 mg/m³ (Silver)

ACGIH Threshold Limit Value (TLV): 0.01 mg/m³(Silver)

H.M.I.S. Information: HEALTH = 1 FLAMMABILITY = 0 REACTIVITY = 0 Page 1

Washington Alloy Company believes that all information and data given is correct. Use this information to assist in making your own evaluations and decisions and should not be mistaken as an expressed or implied warranty. U.S. ALLOY CO. assumes no liability for results or damaged incurred from the use of any information contained herein, in whole or in part .

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: (Method Used): None **Flammable Limits:** Lower-NA, Upper-NA
Extinguishing Media: All **Auto Ignition Temperature:** None
Special Fire Fighting Procedures: Normal Caution When Using metals
Unusual Fire and Explosion Hazards: May produce a variety of metal oxides and fumes when melted

SECTION V - ACCIDENTAL RELEASE MEASURES

Steps to be taken in Case Material is spilled: Solid wire – N/A, Flux spill – use appropriate safety equipment and transfer into safe container

SECTION VI - STABILITY AND REACTIVITY

Stability: Product is Stable **Conditions to Avoid:** Excess Heat
Incompatibility: Strong acids, oxidizers or bases like sodium hydroxide
Hazardous Decomposition Products: Metal oxides and fumes when melted.
Hazardous Polymerization: Will Not Occur

SECTION VII - CONTROL MEASURES

Ventilation: Yes **Local Exhaust:** Yes
Protective Gloves: Recommend, NIOSH Approved **Eye Protection:** Safety Goggles
Mechanical (General): Yes
Respiratory Protection (Type): NIOSH Approved Respirator.
Other Protective Clothing or Equipment: Leather Apron as needed

SECTION VIII - HANDLING AND STORAGE

Precautions to be Taken in Handling and Storage: Store in Cool Area.
Wash hands and clothing thoroughly after use.
Work/Hygienic Practices: Avoid Contact with Skin, Eyes and Clothing. Avoid inhalation or ingestion
Other Precautions: Keep Container Away From Excessive Heat with proper labels.

SECTION IX - PHYSICAL AND CHEMICAL CHARACTERISTICS for Solder

Boiling Point: About 4100° F	Specific Gravity (Water = 1): 6.72
Vapor Pressure (mm Hg): NA	
Vapor Density (Air = 1): NA	Evaporation Rate (Butyl Acetate = 1): NA
Melting Point: 430° F (96/4) 780° F (780)	Solubility in Water: Insoluble
Reactivity in Water: None	Appearance and Odor: Silver gray, odorless

SECTION X - TRANSPORTATION AND DISPOSAL CONSIDERATIONS

D.O.T. Proper Shipping Name: Non-Hazardous	Hazard Class: NA
Identification Number: NA	Packing Group: NA
Type D.O.T Label Required Information: NA	
Waste Disposal Method: Dispose in Accordance with EPA Regulations.	