



SAFETY DATA SHEET

SDS Name: **Mulit Sol Multipurpose Solders**
SolderWeld, Inc.

SECTION I: Identification of the substance/mixture and the company

1.1 Product Identifier

Product name: Mulit Sol Multipurpose Solders

1.2 Relevant Identified uses of the substance and uses advised against

1.2.1 Relevant identified uses

- Main use category : Professional Use
- Industrial/Professional use spec : For Professional use only
- Use of substance : Brazing, soldering, and welding products, flux products

1.2.2 Uses advised against

No additional information available

1.3 Details of Supplier of the Safety Data Sheet

SolderWeld, Inc.
2050 N 300 W #72
Spanish Fork, UT 84660
USA
800-356-8449
info@solderweld.com

1.4 Emergency Telephone Number

Emergency Number : 001-800-424-9300 (Chemtrec)

SECTION 2: Hazards Identification

2.1 Classification of the substance

Hazardous

2.2 Label elements



Signal Word: Danger

Hazard-determining components of labeling: H302, H312, H332, H410

Hazard Statements:

- H302 Harmful if swallowed
- H312 Harmful in contact with skin
- H332 Harmful if inhaled
- H410 Very toxic to aquatic life with long lasting effects

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Precautionary Statements:

- P201 - Obtain special instructions before use
 P202 - Do not handle until all safety precautions have been read and understood
 P234 - Keep only in original container
 P260 - Do not breathe dust/fumes.
 P263 - Avoid contact during pregnancy/while nursing.
 P264 - Wash thoroughly after handling.
 P270 - Do not eat, drink or smoke when using this product.
 P273 - Avoid release to the environment
 P280 - Wear protective gloves, protective clothing, eye protection, face protection
 P301+P330+P331 - IF SWALLOWED: Rinse mouth. Do NOT induce vomiting
 P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Wash.
 +P302+P352 thoroughly with soap and water to remove any residue. If a rash develops, call a physician.
 P305+P351+P338 - IF IN EYES: Flush with water for at least 15 minutes to remove irritant. Remove contact
 lenses, if present and easy to do. Continue rinsing. Consult a physician.
 P304+P341 - IF INHALED: Terminate exposure and remove to fresh air. Call physician; advise of
 chemical composition (section III).
 P308+P313 - IF exposed or concerned: Get medical advice/attention
 P310 - Immediately call a POISON CENTER/doctor
 P363 - Wash contaminated clothing before reuse
 P405 - Store locked up
 P501 - Dispose of contents/container in accordance with local/regional/national/international
 regulations.

2.3 Other Hazards

No additional information available

SECTION 3: Hazards Identification**3.1 Mixture**

*(Hazardous components 1% or greater; Carcinogens 0.1% or greater)

Component	CAS Number	OSHA PEL	ACGIH TLV	Density lbs/in ³ & g/cm ³	% (optional)
Tin (Sn)	7440-31-5	2 mg/m ³	2 mg/m ³	.264 & 7.307	40-49
Zinc (Zn)	7440-66-6	5mg/m ³	5mg/m ³	.257 & 7.114	27-32
Cadmium (Cd)	7440-43-9	.2 dust / .1 fume	.05 mg/m ³ (Dust&Fume)	.312 & 8.636	19-33

NA = Not Applicable

NE = Not Established

NAIF = No Applicable Information found

SECTION 4: First aid measures

4.1 Description of first aid measures

Ingestion: NEVER give anything by mouth if victim is rapidly losing consciousness, or is unconscious or convulsing. Have victim rinse mouth thoroughly with water. DO NOT INDUCE VOMITING. Have victim drink 2-8 oz. (60-240ml) of water. If vomiting occurs naturally, have victim rise mouth with water again. Immediately obtain medical attention and bring a copy of this SDS.

Skin Contact: Dust: Remove contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash gently and thoroughly with lukewarm gently flowing water and non-abrasive soap for 5 minutes. If irritation persists, repeat flushing. Obtain medical advice. Completely decontaminate clothing, shoes and leather goods before reuse or else discard. Molten Metal: Flush contact area to solidify and cool, but do not attempt to remove encrusted material or clothing. Cover burns and seek medical attention immediately.

Inhalation: Remove source of contamination or move victim from exposure area to fresh air immediately. If breathing is difficult, trained personnel should administer medical oxygen. DO NOT allow victim to move around unnecessarily. Treat pulmonary edema as a priority, even if no symptoms (i.e. wheezing, coughing, shortness of breath, tec.) are apparent. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure. Quickly transport victim to an emergency care facility.

Eye Contact: Do not allow victim to rub eye(s). Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing, while holding eyelid(s) open. If irritation persists, immediately obtain medical attention. DO NOT attempt to manually remove anything stuck to the eye. Immediately call a POISON CENTER or doctor/physician.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: CO or dry chemical extinguisher.

5.2 Special hazards arising from the mixture

Flash point & Methods Used: N/A
Flammability Limits: Extinguisher
Media:

Auto Ignition Temperature: N/A
(in air, % by volume) LEL: N/A and UEL: N/A CO or
dry chemical extinguisher.

DO NOT USE WATER ON MOLTEN METAL:
LARGE FIRES MAY BE FLOODED WITH WATER FROM A DISTANCE

5.3 Advice for firefighters

Precautionary measure fire: Finely divided dust may form explosive mixture with air.

Firefighting instructions:

Protection during firefighting: Use NIOSH/MSHA-approved self-contained breathing apparatus and full protective clothing if involved in fire.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

General measures: Solder is solid / recyclable

- Vacuuming is recommended for accumulated metal dust from saw/grind operations.

6.1.1 For non-emergency personnel

Protective equipment:

Wear suitable protective clothing, gloves and eye or face protection.

Emergency procedures:

Ventilate area. Avoid contact with skin and eyes. Avoid breathing dust/fume.

Measures in case of dust release:

Where excessive dust may result, use approved respiratory protection equip.

6.1.2 For emergency responders

Protective equipment:

Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing, gloves and eye or face protection. For further

information refer to section 8: "Exposure controls/personal protection". Avoid contact with skin and eyes. Avoid breathing dust/fume.

Emergency procedures:

Evacuate unnecessary personnel. Ventilate area.

6.2 Environmental precautions

Avoid release to the environment.

6.3 Methods and material for containment and cleaning up

For containment:	No special measures required.
Methods for cleaning up:	Recover mechanically the product. This material and its container must be disposed of in a safe way and as per local legislation.
Other information:	Dispose of in accordance with relevant local regulations. This material and its container must be disposed of as hazardous waste.

6.4 Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer section 13: "Disposal considerations".

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Precautions for safe handling:	Ensure good ventilation of the work station. Obtain special instructions before use. Do not handle until safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Avoid breathing dust/fume.
Hygiene measures:	Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures:	Ensure adequate ventilation, especially in confined areas.
Storage conditions:	Store locked up. Store in well-ventilated place. Keep cool
Incompatible products:	Acetylene, ammonia, ammonium nitrate, aqua regia, dioxane, ethylene oxide, chlorine trifluoride, halogens, hydrogen peroxide, hydrazine, mononitrate, hydrazoic acid, hydroxylamine, hydrogen sulfide, performic acid, phosphorus, selenium, sulfur, titanium plus potassium chlorate, bromates chlorates and iodate of alkali and alkali earth metals.
Storage area:	Store in a well-ventilated area.
Packaging materials:	Keep only in original container.

7.3 Specific end use

Other hot work operations with metals.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Respiratory Protection:	Use NIOSH-approved breathing apparatus to prevent exposure to dusts and fumes.
Eye Protection:	Approved safety glasses/welding goggles, appropriate to your procedure, should be worn.
Ventilation:	Local Exhaust: YES; Mechanical: YES Special: Conform to your regulatory statutes.
Other:	Standard protective equipment used in soldering (/applicable) operations. *Protective gloves are recommended, especially for high temperature applications to prevent burns. *Conform to all local, state, federal regulations.

8.2 Exposure controls

Appropriate engineering controls:	Provide adequate general and local exhaust ventilation
Personal protective equipment:	Combined gas/dust mask with filter type P3. Gloves. Safety glasses.

Materials for protective clothing:

Hand protection:

Eye protection:

Skin and body protection:

Respiratory protection:

Protective clothing.

Wear suitable protective clothing

Protective gloves

Safety glasses.

Wear suitable protective clothing

Use NIOSH-approved breathing apparatus to prevent exposure to dusts and fumes.



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Boiling Point:	Cd @ 1409°F / 765°C and Zn @ 1665°F / 907°C
Melting Point:	265 to 316 °C / 509 to 600 °F
Vapor Pressure (mm Hg.):	CADMIUM ONLY: Health Significance ONLY >500°C
Vapor Density (AIR = 1):	N/A
Density:	.3027 lbs/cu in or 8.377g/ml
Solubility in Water:	0 (solid)
Evaporation Rate (Butyl Acetate = 1):	N/A
Appearance and Odor:	Lustrous, silver metal; odorless / various shapes and sizes.

9.2 Other information

No additional information available

SECTION 10: Stability and reactivity

10.1 Reactivity

Stability: Stable

Safe under normal conditions

10.3 Possibility of hazardous reactions

Wet or moist ingot(s) WILL present an explosion hazard when submerged in molten solder.

10.4 Conditions to avoid

None.

10.5 Incompatible materials

Strong Acids, Strong Alkalis

10.6 Hazardous decomposition products

None; Hazardous Polymerization will not occur

SECTION 11: Toxicological information**11.1 Information on toxicological effects**

Cadmium (Cd): Fume produces metal fume fever which may result in severe tracheobronchitis, pneumonitis, pulmonary edema. Suspected acute inhalation exposure to Cadmium must be treated for pulmonary edema (throat dryness, cough, headache, vomiting, chest pains, and chills) by a physician. Delay until onset of pulmonary involvement may result in death. Cadmium is transported via blood and stored in liver and kidneys. Can cause kidney damage. Chronic overexposure to Cadmium has been reported to cause an increased incidence of cancer of the prostate in men.

Zinc (Zn): Excessive inhalation of zinc oxide fumes may produce symptoms known as "zinc shakes" which are flu-like and usually cease when the individual is removed from the source.

SECTION 12: Ecology information**12.1 toxicity**

Ecology - general: Not established

Ecology- Water: Not established

12.2 Persistence and degradability

Persistence and degradability: Not established

12.3 Bioaccumulative potential

Bioaccumulative potential: Not established

12.4 Mobility in soil

Ecology - Soil: Not established

12.5 Results of PBT and vPvB assessment

Not Applicable

12.6 Other adverse effects

IT IS UNLIKELY THAT NORMAL EXPOSURE (USING APPROPRIATE PROTECTIVE EQUIPMENT) WILL RESULT IN ILLNESS.

	*0 = Insignificant	1 = Slight	2 = Moderate	3 = High	4 = Extreme
		Health	Flammability	Reactivity	Special
NFPA Rating		1	0	0	0
HMIS Rating		1	0	0	0

SECTION 13: Disposal consideration**13.1 Waste treatment methods**

- Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- Disposal must be made according to official regulations. Dispose of according to federal, state, local, international, and OSHA regulations.

SECTION 14: Transport information**In accordance with ADR / RID / IMDG / IATA / ADN**

Ground - DOT Proper Shipping Name: Solder
Not regulated for transport by US DOT.

Air - IATA Proper Shipping Name: Solder
Not regulated for air transport by IATA.

14.1 UN number

UN-No. (ADR)	Not applicable
UN-No. (IMDG)	Not applicable
UN-No. (IATA)	Not applicable
UN-No. (ADN)	Not applicable
UN-No. (RID)	Not applicable

14.2 UN proper shipping name

Proper shipping name (ADR)	Not applicable
Proper shipping name (IMDG)	Not applicable
Proper shipping name. (IATA)	Not applicable
Proper shipping name (ADN)	Not applicable
Proper shipping name (RID)	Not applicable

14.3 Transport hazard class(es)

ADR	
Transport hazard class(es)	Not Applicable
IMDG	
Transport hazard class(es)	Not Applicable
IATA	
Transport hazard class(es)	Not Applicable
ADN	
Transport hazard class(es)	Not Applicable
RID	
Transport hazard class(es)	Not Applicable

14.4 Packing group

Packing group (ADR)	Not applicable
Packing group (IMDG)	Not applicable
Packing group (IATA)	Not applicable
Packing group (ADN)	Not applicable
Packing group (RID)	Not applicable

SECTION 15: Regulatory information

SARA Title III Program:

- This product contains the following toxic chemicals subject to the reporting requirements of EPCRA of 1986 and 40 CFR 372.

CHEMICAL NAME	CAS NO.	% / WEIGHT
Zinc (Zn) – Fume & Dust	7440-66-6	27 – 32%
Cadmium (Cd)	7440-43-9	19 – 33%

SECTION XVI: OTHER INFORMATION

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This information must be included in all SDS that are copied and distributed for this material.

**GOOD HOUSEKEEPING PROCEDURES SHOULD BE MAINTAINED.
PERSONNEL SHOULD WASH THOROUGHLY BEFORE SMOKING OR EATING
FOOD AND DRINK SHOULD NOT BE CONSUMED, TOBACCO PRODUCTS USED, OR COSMETICS
APPLIED IN AREAS WHERE EXPOSURES EXIST.**

Please retain this sheet for your files. SolderWeld, Inc. maintains a file of Safety Data Sheets (SDS) for each rod and flux produced in compliance with Federal OSHA Hazard Communication Standard (29 CFR 1910.1200) & various right-to-know laws.

~~The information and recommendations contained within this publication have been compiled from sources believed to be reliable and to represent the best information available to SolderWeld, Inc. at the time of issue. It is our policy to include an SDS with initial orders for each product. This submission is to become a matter of record and need not accompany subsequent shipments for the same product to the same customer. The information contained on this sheet is intended solely~~

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