

# 1. Identification

**Product Identifier:** Tin-Zinc Solders for Aluminum to Aluminum and/or Copper

Other means of Identification

**Description:** Solder kit

**Product code:** UNICOIL 4025 (UNI-4300)

**Recommended use:** Solder for Aluminum to Aluminum and/or Copper

**Recommended restrictions:** None known

Manufacturer/Importer/Supplier/Distribution information:

**Supplier:** Uniweld Products, Inc.

Address: 2850 Ravenswood Road, Ft. Lauderdale, FL 33312, United States of America

Emergency: For Hazardous Materials [or Dangerous Goods] Incident Spill, Leak,

Fire, Exposure, or Accident Call CHEMTREC Day or Night within USA and Canada: 1-800-424-9300 or +1 703-527-3887 (collect calls accepted)

2. Hazard(s) identification

Physical hazards: Inhalation: fumes

**Health hazards:** Not classified

**OSHA defined hazards:** While this material is not considered hazardous by the OSHA Hazard Communication

Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available

for employees and other users of this product.

Signal word: No Signal Word

**Hazard statement:** No known significant effects or critical hazards.

**Precautionary statement** 

**Prevention:** Keep away from heat/sparks/open flames/hot surfaces-No Smoking.

Response: Not Applicable

**Storage:** Protect from sunlight. Store in a well-ventilated place.

**Disposal:** Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified(HNOC): Not Applicable

# 3. Composition/Information on ingredients

#### **Substances**

Chemical name:	Common name and synonyms	CAS number:	%:
Tin (Sn)		7440-31-5	91-48
ZinC (Zn)		7440-66-6	9-52



4. First-aid measures

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give

artificial respiration. Call a physician or poison control center immediately.

Skin contact: Remove contaminated clothing immediately and wash skin with soap and

water. Get medical attention if irritation develops and persists.

Seek medical assistance.

**Eye contact:** Immediately flush eyes with plenty of water for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

Get medical attention immediately.

Ingestion: Wash out mouth with water. Remove victim to fresh air and keep at rest in a

position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting

unless directed to do so by medical personnel. Get medical attention if

symptoms occur.

**Most important** 

symptoms/effects, acute and

delayed:

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Flu-like symptoms (nausea, constipation, headache, dizziness) - self-limiting,

usually disappear within 24 hours.

Indication of immediate medical attention and special

treatment needed:

Exposure may aggravate pre-existing respiratory disorders.

Treat symptomatically.

**General information:** Ensure that medical personnel are aware of the material(s) involved, and take

precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media: CO2 or dry chemical extinguisher.

Unsuitable extinguishing media: None known.

Specific hazards arising from

the chemical:

DO NOT USE WATER ON MOLTEN METAL

LARGE FIRES MAY BE FLOODED WITH WATER FROM A DISTANCE

**Special protective equipment** and precautions for firefighters:

Fire-fighting equipment/instructions:

Finely divided dust may form explosive mixture with air.

Use NIOSH/MSHA -approved self-contained breathing apparatus and full protective

clothing if involved in fire.

NEVER DROP WATER OR LIQUIDS INTO MOLTEN SOLDER. **Specific methods:** 

Do not plunge damp or wet solder bars/pieces into molten solder.

General fire hazards: No known significant effects or critical hazards.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. In case of inadequate ventilation, use respiratory protection. Wear appropriate personal protective equipment (See Section 8).

**Methods and materials** for containment and cleaning up: Vacuuming is recommended for accumulated metal dust from saw/grind operations.

**Environmental precautions:** Solder is solid / recyclable.



### 7. Handling and storage

**Precautions for safe handling:** Eliminate all sources of ignition. Wear appropriate personal protective equipment

(See Section 8). Eating, drinking, and smoking should be prohibited in areas where

this material is handled, stored, and processed.

Wet or moist ingot(s) WILL present an explosion hazard when submerged in molten solder. \*AVOID FIRE/EXPLOSION RISKS. Always preheat ingot before

charging into furnace.

Conditions for safe storage, including any incompatibilities:

Store in accordance with local, regional, national, and international regulations.

Store in a cool, dry, well-ventilated place.

#### 8. Exposure controls/personal protection

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

**Biological limit values:** No biological exposure limits noted for the ingredient(s).

**Exposure guidelines:** Follow standard monitoring procedures.

Individual protection measures, such as personal protective equipment.

**Eye/face protection:** Wear approved safety glasses or goggles.

**Skin protection**: Wear appropriate chemical resistant gloves.

**Other:** Wear protective clothing appropriate for the risk of exposure.

**Respiratory protection:** If engineering controls do not maintain airborne concentrations below recommended

exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.

**Thermal hazards:** Wear appropriate thermal protective clothing, when necessary.

**General hygiene** Do not eat, drink or smoke when using the product. Wash thoroughly after handling.

considerations: Provide eyewash station and safety shower. Handle in accordance with good industrial

hygiene and safety practices.

#### 9. Physical and chemical properties

**Appearance:** Lustrous, silver metal; **Physical state:** Various shapes and sizes.

Form: Coil
Color: Silver
Odor: Odorless
Odor threshold: Not available.
pH: Not applicable.

**Melting point:** 390 - 650 °F / 198 - 343 °C

Flash point:Not applicable.Evaporation rate:Not applicable.Flammability (solid, gas):Not applicable.

Upper/lower flammability or explosive limits

Flammability limit-lower(%):
Not applicable.
Flammability limit-upper(%):
Not applicable.
Explosive limit-lower(%):
Not available.
Vapor pressure:
Vapor density:
Relative density:
Not applicable.
Not applicable.
Not applicable.
Not applicable.
Not applicable.



Issue date: March-2016

Solubility (ies)

Solubility (water): Solid

Partition coefficient (n-octanol/water):
Auto-ignition temperature:

Decomposition temperature:

Viscosity:

Not applicable.

Not applicable.

Not available.

Not available.

Other information

**VOC (Weight%):** Not available.

## 10. Stability and reactivity

**Reactivity:**The product is non-reactive under normal conditions of use, storage and transport.

**Chemical stability:** Stable under normal temperature conditions and recommended use.

**Possibility of hazardous reactions:** Polymerization will not occur.

**Conditions to avoid:** Heat, flames and sparks.

**Incompatible materials:** Strong Acids, Strong Alkalis

**Hazardous decomposition products:** None.

## 11. Toxicological information

Information on likely routes of exposure

**Ingestion:** If material has been swallowed and the exposed person is conscious, give small

quantities of water to drink. Do not induce vomiting unless directed to do so by

medical personnel. Get medical attention if symptoms occur.

**Inhalation:** 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.

**Skin contact:** If a rash develops, call a physician.

**Eye contact:** NOT generally considered to be toxic.

Information on toxicological effects

**Skin corrosion/irritation:** NOT generally considered to be toxic.

**Serious eye damage/eye irritation:** NOT generally considered to be toxic.

Respiratory or skin sensitization

**Respiratory sensitization:** Not classified.

**Skin sensitization:** Not classified.

**Germ cell mutagenicity:** Not classified.

**Carcinogenicity:** Not classified.

IARC Monographs. Overall Evaluation or Carcinogencity

**Reproductive toxicity:** Not classified.

Specific target organ toxicity-

**single exposure:** Not classified.

Specific target organ toxicity-

repeated exposure:

Aspiration hazard:

Not classified.

Not classified.

Not classified.



#### 12. Ecological information

**Ecotoxicity:** Not expected to be harmful to aquatic organisms.

**Persistence and degradability:** This product will not biodegrade. It will oxidize if left out in the elements,

but will not affect the surrounding ecology

**Bioaccumulative potential:** The product is not expected to Bioaccumulate.

# 13. Disposal considerations

**Disposal instructions:** Dispose in accordance with all applicable regulations.

**Local disposal regulations:** Dispose in accordance with all applicable regulations.

**Waste from residues / unused products:** Dispose of in accordance with local regulations.

#### 14. Transport information

**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.

## 15. Regulatory information

**Federal Regulations** 

**SARA Title III Program:** 

This product contains no toxic chemicals subject to the reporting requirements of the Emergency Planning and Community Right to Know Act (EPCRA) of 1986 and 40 CFR 372

**Other Regulations** 

WARNING: CALIFORNIA PROPOSITION 65: This product, when used for welding, soldering, brazing, cutting and other metal working or flame processes, produces fumes, particulates, residues and/or other by-products which contain chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

US-California Proposition 65-Carcinogens & Reproductive Toxicity (CRT): Listed substance: Not listed.

# 16. Other information, including date of preparation or last revision

**Issue date:** 1-Mar-2016

Version #: 01

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. Uniweld Products, Inc. maintains a file of Safety Data Sheets (SDS) for each alloy 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 Uniweld Products, Inc. at the time of issue. 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 for employee health and safety education and not for contract specification purposes. No warranty, guarantee, or representation is made by Uniweld Products, Inc. nor does Uniweld Products, Inc. assume any responsibility in connection there within; nor can it be assumed that all acceptable safety measures or other safety measures may not be required under particular or exceptional conditions or circumstances. Should you need additional information, contact us

**Disclaimer:** 

All information in this Safety Data Sheet is believed to be accurate and reliable. However, no guarantee or warranty of any kind is made with regards to the accuracy of information or the suitability of the recommendations contained herein. It is the user's responsibility to assess the safety and toxicity of this product under their own conditions of use and to comply with all applicable laws and regulations.

