

## 1. PRODUCT AND COMPANY IDENTIFICATION:

**PRODUCT NAME:** Super Alloy 1 Rod

**MANUFACTURER:** Muggy Weld LLC  
1630 Shaker Church Rd NW  
Olympia, WA 98502 U.S.A.  
Phone: 866-684-4993  
E-mail: [mike@muggyweld.com](mailto:mike@muggyweld.com)

**EMERGENCY TELEPHONE NUMBER: 360-485-2887**

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Reproductive toxicity, Category 1A	H360
------------------------------------	------

Reproductive toxicity, Additional category, Effects on or via lactation H362

Hazardous to the aquatic environment — Acute Hazard, Category 1 H400

Hazardous to the aquatic environment — Chronic Hazard, Category 1 H410

Full text of H statements : see section 16

Adverse physicochemical, human health and environmental effects

May damage fertility. May damage the unborn child. May cause harm to breast-fed children. Very toxic to aquatic life with long lasting effects.

## 2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS08



GHS09

Signal word (CLP) : Danger

Hazardous ingredients	: Lead
-----------------------	--------

Hazard statements (CLP)	: H360 - May damage fertility or the unborn child H362 - May cause harm to breast-fed children H410 - Very toxic to aquatic life with long lasting effects
-------------------------	--

Precautionary statements (CLP)	: P201 - Obtain special instructions before use P202 - Do not handle until all safety precautions have been read and understood P260 - Do not breathe dust, fume P263 - Avoid contact during pregnancy/while nursing P264 - Wash hands thoroughly after handling P270 - Do not eat, drink or smoke when using this product P273 - Avoid release to the environment P280 - Wear protective gloves, eye protection, face protection, protective clothing P308+P313 - IF exposed or concerned: Get medical advice/attention P391 - Collect spillage
--------------------------------	---

2/10



Regulation (EC) No. 1272/2008 (CLP) with its amendment Regulation (EU) 2015/830

## SECTION 5: Fire-fighting measures

### 5.1. Extinguishing media

Suitable extinguishing media : Dry powder. Use extinguishing media appropriate for surrounding fire.

### 5.2. Special hazards arising from the substance or mixture

Fire hazard : The product is not flammable.

Explosion hazard : Product is not explosive.

Reactivity in case of fire : Not known.

Hazardous decomposition products in case of fire : Toxic fumes may be released.

### 5.3. Advice for firefighters

Precautionary measures fire : No special measures required.

Firefighting instructions : Use extinguishing media appropriate for surrounding fire.

Protection during firefighting : Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

General measures : Avoid release to the environment.

#### 6.1.1. For non-emergency personnel

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

Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Do not breathe dust, fume.

#### 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. Do not breathe Dust, fume.

Emergency procedures : Ventilate area.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

For containment : Collect spillage.

Methods for cleaning up : Pick up solid material. Place in a suitable container for disposal in accordance with the waste regulations (see Section 13). This material and its container must be disposed of in a safe way, and as per local legislation.

Other information : 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 to 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. Wear personal protective equipment. Avoid creating or spreading dust. Do not breathe dust, fume.

Hygiene measures : Always wash hands after handling the product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

### 7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Ensure adequate ventilation, especially in confined areas.

Storage conditions : Store in a well-ventilated place.

Incompatible products : Corrosive substances.

Incompatible materials : Acetylene; ammonia; nitric acid; ethylene imine; sulfuric acid; chlorine trifluoride; peroxides; permonosulfuric acid; peroxyformic acid; oxalic acid; tartaric acid; bromoazide; halogens; bromine trifluoride; cupric nitrate; sulfur.

Storage area : Store in a well-ventilated place.

Packaging materials : Keep only in original container.

### 7.3. Specific end use(s)

Welding and soldering products, flux products.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

<b>Tin (7440-31-5)</b>		
United Kingdom	Local name	Tin
United Kingdom	WEL TWA (mg/m³)	2 mg/m³ compounds, inorganic, except SnH <sub>4</sub> , (as Sn) 0.1 mg/m³ compounds, organic, except Cyhexatin (ISO), (as Sn)
United Kingdom	WEL STEL (mg/m³)	4 mg/m³ compounds, inorganic, except SnH <sub>4</sub> , (as Sn) 0.2 mg/m³ compounds, organic, except Cyhexatin (ISO), (as Sn)
<b>Cadmium (7440-43-9)</b>		
United Kingdom	Local name	Cadmium
United Kingdom	WEL TWA (mg/m³)	0.025 mg/m³ and cadmium compounds except cadmium oxide fume, cadmium sulphide and cadmium sulphide pigments (as Cd)
United Kingdom	Remark (WEL)	Carc (Capable of causing cancer and/or heritable genetic damage. See paragraphs 49–51) (cadmium metal, cadmium chloride, fluoride and sulphate)

## 8.2. Exposure controls

### Appropriate engineering controls:

Ensure good ventilation of the work station.

### Personal protective equipment:

Gloves. Safety glasses.

### Materials for protective clothing:

Wear suitable protective clothing

### Hand protection:

Protective gloves

### Eye protection:

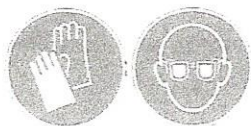
Safety glasses

### Skin and body protection:

Wear suitable protective clothing

### Respiratory protection:

During brazing operations, the most significant route of overexposure is via inhalation of fumes, in case of insufficient ventilation, wear suitable respiratory equipment.



### Environmental exposure controls:

Avoid release to the environment.

### Other information:

During brazing operations, the most significant route of overexposure is via inhalation of fumes.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Silver-gray alloy. Metallic wire, rod, strip.
Colour	: Silver.
Odour	: odourless.
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: No data available



Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Flammability (solid, gas)	: Non flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: Not applicable
Solubility	: insoluble in water.
Log Pow	: No data available
Viscosity, kinematic	: Not applicable
Viscosity, dynamic	: No data available
Explosive properties	: Product is not explosive.
Oxidising properties	: Oxidising solids Not applicable.
Explosive limits	: Not applicable

9.2. Other information

No additional information available

**SECTION 10: Stability and reactivity**

10.1. Reactivity

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

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

Acetylene; ammonia; nitric acid; ethylene imine; sulfuric acid; chlorine trifluoride; peroxides; permonosulfuric acid; peroxyformic acid; oxalic acid; tartaric acid; bromoazide; halogens; bromine trifluoride; cupric nitrate; sulfur.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

**SECTION 11: Toxicological information**

11.1. Information on toxicological effects

Acute toxicity

: ACUTE "Metal Fume Fever" Symptoms include: irritation of eyes, nose, throat, and skin; flu-like symptoms – sudden or delayed onset of chills, weakness, fatigue, nausea, vomiting, headache, diarrhea, muscular pains; tightness of chest; paralysis; loss of consciousness or death. Acute exposure to cadmium may cause pneumonitis, bronchitis, and pulmonary edema. Chronic exposure may cause gastrointestinal symptoms, anemia, rhinitis, discoloration of teeth, kidney disease, microfractures, and cancer. (Based on available data, the classification criteria are not met)

<b>Cadmium (7440-43-9)</b>	
LD50 oral	1140 mg/kg
LC50 inhalation rat (Dust/Mist - mg/l/4h)	0.0031 mg/l/4h

Skin corrosion/irritation	: Not classified (Alloys in their solid state do not produce inhalation risks, skin or ingestion hazards. However, heating, welding, thermal spraying, cutting, brazing, grinding and machining may cause dust or fumes to be released which could be harmful if inhaled.)
Additional information	: Contact dermatitis may result from direct exposure to the skin.
Serious eye damage/irritation	: Not classified (Alloys in their solid state do not produce inhalation risks, skin or ingestion hazards. However, heating, welding, thermal spraying, cutting, brazing, grinding and machining may cause dust or fumes to be released which could be harmful if inhaled.)
Additional information	: Dust from this product may cause eye irritation
Respiratory or skin sensitisation	: Not classified (As supplied/shipped, these complex alloys in massive form have no known immediate health hazards other than causing allergic reactions in individuals sensitive to the metals contained in the alloys. Alloys in their solid state do not produce inhalation risks, skin or ingestion hazards. However, heating, welding, thermal spraying, cutting, brazing, grinding and machining may cause dust or fumes to be released which could be harmful if inhaled.)

<div style="text-align: center;"> </div>	
Germ cell mutagenicity	: Cadmium if inhaled, is suspected of causing genetic defects. Severe lead toxicity has long been known to cause sterility, abortion and neonatal mortality and morbidity. (Alloys in their solid state do not produce inhalation risks, skin or ingestion hazards. However, heating, welding, thermal spraying, cutting, brazing, grinding and machining may cause dust or fumes to be released which could be harmful if inhaled.)
Carcinogenicity	: Lead is classified as a 2B carcinogen by the IARC, evidence for carcinogenicity is adequate in animals but inadequate for humans. (Based on available data, the classification criteria are not met)
Reproductive toxicity	: Severe lead toxicity has long been known to cause sterility, abortion and neonatal mortality and morbidity.
STOT-single exposure	: Not classified (Based on available data, the classification criteria are not met)
STOT-repeated exposure	: Not classified (Based on available data, the classification criteria are not met)
Aspiration hazard	: Not classified (Alloys in their solid state do not produce inhalation risks, skin or ingestion hazards. However, heating, welding, thermal spraying, cutting, brazing, grinding and machining may cause dust or fumes to be released which could be harmful if inhaled.)
Other information	: Likely routes of exposure: inhalation.

## SECTION 12: Ecological information

### 12.1. Toxicity

Ecology - general	: Very toxic to aquatic life with long lasting effects.
Ecology - water	: Very toxic to aquatic life with long lasting effects.

## 12.2. Persistence and degradability

### Soldering Alloys (Cd & Pb Containing)

Persistence and degradability	The product is not biodegradable.
-------------------------------	-----------------------------------

### 12.3. Bioaccumulative potential

### Soldering Alloys (Cd & Pb Containing)

Bioaccumulative potential	Not established.
---------------------------	------------------

#### 12.4. Mobility in soil

### Soldering Alloys (Cd & Pb Containing)

Ecology - soil	Not established.
----------------	------------------

### 12.5. Results of PBT and vPvB assessment

## Component

Cadmium (7440-43-9)	<p>This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII</p> <p>This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII</p>
---------------------	--

### 12.6. Other adverse effects

Other adverse effects	: None known.
Additional information	: Avoid release to the environment

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Regional legislation (waste)	: Disposal must be done according to official regulations.
Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Avoid release to the environment. Dispose of contents/container to a hazardous or special waste collection point.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

## 14.1. UN number

UN-No. (ADR)	: 3077
UN-No. (IMDG)	: 3077
UN-No. (IATA)	: 3077
UN-No. (ADN)	: 3077
UN-No. (RID)	: 3077

14.2. UN proper shipping name

Proper Shipping Name (ADR)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cadmium(7440-43-9))
Proper Shipping Name (IMDG)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cadmium(7440-43-9))



# Safety Data Sheet

Latest Revision: January 2017

Page 7 of 10

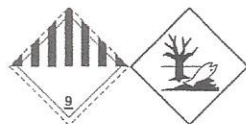
Muggy Weld, LLC.

Proper Shipping Name (IATA)	: Environmentally hazardous substance, solid, n.o.s. (Cadmium(7440-43-9))
Proper Shipping Name (ADN)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cadmium(7440-43-9))
Proper Shipping Name (RID)	: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cadmium(7440-43-9))
Transport document description (ADR)	: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cadmium(7440-43-9)), 9, III, (E)
Transport document description (IMDG)	: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cadmium(7440-43-9)), 9, III, MARINE POLLUTANT
Transport document description (IATA)	: UN 3077 Environmentally hazardous substance, solid, n.o.s. (Cadmium(7440-43-9)), 9, III
Transport document description (ADN)	: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cadmium(7440-43-9)), 9, III
Transport document description (RID)	: UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Cadmium(7440-43-9)), 9, III

## 14.3. Transport hazard class(es)

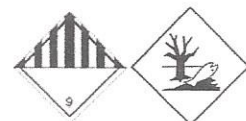
### ADR

Transport hazard class(es) (ADR)	: 9
Danger labels (ADR)	: 9



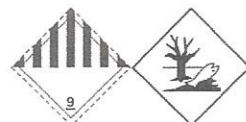
### IMDG

Transport hazard class(es) (IMDG)	: 9
Danger labels (IMDG)	: 9



### IATA

Transport hazard class(es) (IATA)	: 9
Hazard labels (IATA)	: 9



### ADN

Transport hazard class(es) (ADN)	: 9
Danger labels (ADN)	: 9



### RID

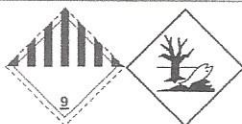
Transport hazard class(es) (RID)	: 9
Danger labels (RID)	: 9

# Safety Data Sheet

Latest Revision: January 2017

Page 8 of 10

Muggy Weld, LLC.



## 14.4. Packing group

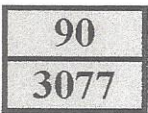
Packing group (ADR) : III  
Packing group (IMDG) : III  
Packing group (IATA) : III  
Packing group (ADN) : III  
Packing group (RID) : III

## 14.5. Environmental hazards

Dangerous for the environment : Yes  
Marine pollutant : Yes  
Other information : No supplementary information available

## 14.6. Special precautions for user

### - Overland transport

Classification code (ADR) : M7  
Special provisions (ADR) : 274, 335, 601, 375  
Limited quantities (ADR) : 5kg  
Excepted quantities (ADR) : E1  
Packing instructions (ADR) : P002, IBC08, LP02, R001  
Special packing provisions (ADR) : PP12, B3  
Mixed packing provisions (ADR) : MP10  
Portable tank and bulk container instructions (ADR) : T1, BK1, BK2  
Portable tank and bulk container special provisions (ADR) : TP33  
Tank code (ADR) : SGAV, LGBV  
Vehicle for tank carriage : AT  
Transport category (ADR) : 3  
Special provisions for carriage - Packages (ADR) : V13  
Special provisions for carriage - Bulk (ADR) : VC1, VC2  
Special provisions for carriage - Loading, unloading and handling (ADR) : CV13  
Hazard identification number (Kemler No.) : 90  
Orange plates : 

Tunnel restriction code (ADR) : E  
EAC code : 2Z

### - Transport by sea

Special provisions (IMDG) : 274, 335, 966, 967  
Limited quantities (IMDG) : 5 kg  
Excepted quantities (IMDG) : E1  
Packing instructions (IMDG) : P002, LP02  
Special packing provisions (IMDG) : PP12  
IBC packing instructions (IMDG) : IBC08  
IBC special provisions (IMDG) : B3  
Tank instructions (IMDG) : T1, BK1, BK2, BK3  
Tank special provisions (IMDG) : TP33  
EmS-No. (Fire) : F-A  
EmS-No. (Spillage) : S-F  
Stowage category (IMDG) : A



MFAG-No	: 171
<b>- Air transport</b>	
PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y956
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 956
PCA max net quantity (IATA)	: 400kg
CAO packing instructions (IATA)	: 956
CAO max net quantity (IATA)	: 400kg
Special provisions (IATA)	: A97, A158, A179, A197
ERG code (IATA)	: 9L
<b>- Inland waterway transport</b>	
Classification code (ADN)	: M7
Special provisions (ADN)	: 274, 335, 61
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Carriage permitted (ADN)	: T* B**
Equipment required (ADN)	: PP, A
Number of blue cones/lights (ADN)	: 0
Additional requirements/Remarks (ADN)	: * Only in the molten state. ** For carriage in bulk see also 7.1.4.1. *** Only in the case of transport in bulk.
<b>- Rail transport</b>	
Classification code (RID)	: M7
Special provisions (RID)	: 274, 335, 601
Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: PP12, B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1, BK1, BK2
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAV, LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W13
Special provisions for carriage – Bulk (RID)	: VW1
Special provisions for carriage – Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE11
Hazard identification number (RID)	: 90

#### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable

### SECTION 15: Regulatory information

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

##### 15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration  $\geq 0.1\%$  or with a lower specific limit: Cadmium (EC 231-152-8, CAS 7440-43-9)

Contains no REACH Annex XIV substances

##### 15.1.2. National regulations

Seveso Directive : 2012/18/EU (Seveso III)

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

**SECTION 16: Other information**

Full text of H- and EUH-statements:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Lact.	Reproductive toxicity, Additional category, Effects on or via lactation
Repr. 1A	Reproductive toxicity, Category 1A
H360	May damage fertility or the unborn child
H360Fd	May damage fertility. Suspected of damaging the unborn child
H362	May cause harm to breast-fed children
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

SDS EU (REACH Annex II)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*