CASWELL INC

Safety Data Sheet
Casweld AL

SECTION 1: Identification

1.1 Product identifier

Product name	Casweld AL
Product number	CWAL
Brand	Caswell

1.4 Supplier's details

Name	Caswell Inc
Address	7696 Route 31 Lyons, NY 14489 USA
Telephone	315 946 1213
Fax	315 946 4456
email	sales@caswellplating.com

1.5 Emergency phone number(s)

Office Hours (9-4ET): 315 946 1213
24 Hour: CHEMTEL US# 1-800-255-3924 Intl# +01-813-248-0585

SECTION 2: Hazard identification

General hazard statement
Not considered a hazard in its solid form. Hazards are from fumes during use and heat.

2.1 Classification of the substance or mixture

GHS classification in accordance with: (EC) No 1272/2008 (CLP)
- Flammable solids (chapter 2.7), Cat. 2

2.2 GHS label elements, including precautionary statements

Pictogram

Signal word **Warning**

Hazard statement(s)

H228	Flammable solid

Precautionary statement(s)

P210	Keep away from heat, hot surfaces, sparks, open flames, and other ignition sources. No smoking.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/…/equipment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P370+P378	In case of fire: Use … to extinguish.

SECTION 3: Composition/information on ingredients

3.1 Substances

Hazardous components

1. Aluminum (Wire)

Concentration	80 - 95 %
EC no.	231-072-3
CAS no.	7429-90-5
Index no.	013-002-00-1

2. Silicon (metal)

Concentration	5 - 15 %
CAS no.	7440-21-3

SECTION 4: First-aid measures

4.1 Description of necessary first-aid measures

General advice	Consult a physician. Show this safety data sheet to the doctor in attendance.
If inhaled	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
In case of skin contact	Wash off with soap and plenty of water. Get medical attention if symptoms occur.
In case of eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If swallowed	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Personal protective equipment for first-aid responders
See section 8

4.2 Most important symptoms/effects, acute and delayed
not established

4.3 Indication of immediate medical attention and special treatment needed, if necessary
not established

SECTION 5: Fire-fighting measures

5.1 Suitable extinguishing media
Use water spray, alcohol resistant foam, dry chemical or carbon dioxide. Welding sparks can ignite combusible and flammable materials. Use media recommended for burning material.

5.2 Specific hazards arising from the chemical
Aluminum Oxides, Silicon Oxides

5.3 Special protective actions for fire-fighters
Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
See section 8

6.2 Environmental precautions
See section 13

6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

7.2 Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

1. Silicon (CAS: 7440-21-3)
PEL (Inhalation): See PNOR (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

2. Silicon, Total dust (CAS: 7440-21-3)
PEL (Inhalation): 15 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

3. Silicon, Total dust (CAS: 7440-21-3)
PEL (Inhalation): 10 mg/m3, See PNOR (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

4. Silicon, Total dust (CAS: 7440-21-3)
REL (Inhalation): 10 mg/m3 (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

5. Silicon, Respirable fraction (CAS: 7440-21-3)
PEL (Inhalation): 5 mg/m3 (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

6. Silicon, Respirable fraction (CAS: 7440-21-3)
PEL (Inhalation): 5 mg/m3, See PNOR (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

7. Silicon, Respirable fraction (CAS: 7440-21-3)
REL (Inhalation): 5 mg/m3 (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

8.2 Appropriate engineering controls
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

8.3 Individual protection measures, such as personal protective equipment (PPE)

Pictograms

Eye/face protection
Welder's helmet or face shield with color absorbing lenses. Shield and filter to provide protection from UV radiation, infrared and molten metal approved to standard EN379. Filter shade to be a minimum of shade 9.

Skin protection
Heat resistant protective clothing. Safety boots, apron, arm and shoulder protection.

Body protection
Type A or B gloves. Type B recommended when high dexterity is required.

Respiratory protection
Use an air purifying dust respirator when welding or brazing in a confined space, or when local exhaust or ventialtion is not sufficient to keep exposure values within safe limits.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance/form (physical state, color, etc.)	Solid
Odor	None
Odor threshold	Not Available
pH	Not Available
Melting point/freezing point	1080 deg F
Initial boiling point and boiling range	Not Available
Flash point	Not Available
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Upper/lower flammability limits	Not Available
Vapor pressure	Not Available
Vapor density	Not Available
Relative density	6 g/cm3
Solubility(ies)	Insoluble
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	Not Available
Decomposition temperature	Not Available
Viscosity	Not Available

Explosive properties	Not Available
Oxidizing properties	Not Available

SECTION 10: Stability and reactivity

10.1 Reactivity
Contact with chemical substances like acids or strong bases cause generation of gas. Keep away from any possible contact with water, because of violent reaction and possible flash fire.

10.2 Chemical stability
Stable

10.5 Incompatible materials
Reacts with water and acid

10.6 Hazardous decomposition products
When this product is used in a welding process, hazardous decomposition product would include those from volatilization, reaction or oxidation of the material listed in section 3 and those from the base metal and coating. The amount of fumes generated from this product varies with welding parameters and dimensions. Refer to applicable national exposure limits for fume compounds, including those exposure limits for fume compounds found in section 3. Reasonably expected gaseous products would include carbon oxides, nitrogen oxides and ozone. Air contaminants around the welding area can be affected by the welding process and influence the composition and quality of fumes and gases produced.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Overexposure to welding fumes may result in symptoms like metal fume fever, dizziness, nausea, dryness or irritation of the nose, throat or eyes. May cause sensitisation by skin contact.

LD/LC50 Values that are relevant for classification
Aluminum 7429-90-5 Oral LD50 >15900 mg/kg (rat) Inhalation LC50 >.888 mg/L/4 hr. (rat) LC50 12 mg/l (96h) (rainbow trout)

Silicon 7440-21-3 Oral LD50 3160 mg/kg (rat)

Respiratory or skin sensitization
Overexposure to welding fumes may affect pulmonary function.

Carcinogenicity
Inhalation of welding fumes and gases can be dangerous to your health. Classification of welding fumes is difficult because of varying base materials, coatings, air contaminants and processes. The Internal Agency for Research on Cancer has classified welding fumes as possible carcinogenic to humans (Group 2B).

STOT-repeated exposure
Overexposure to welding fumes may affect pulmonary function.

SECTION 12: Ecological information

Toxicity
Welding rods contain metals which are considered to be very toxic towards aquatic organisms. Finely divided welding rods are therefore considered harmful to aquatic organisms

Bioaccumulative potential
Welding rods contain heavy metals which bio accumulates in the food chain. The following figures are the bio concentration factor (BCF) for the substances on their own. BCF: Aluminum, BCF: 18

SECTION 13: Disposal considerations

Disposal of the product
Consult appropriate federal and local regulations for disposal. Empty containers are subject to the same regulations.

Disposal of contaminated packaging
Consult appropriate federal and local regulations for disposal. Empty containers are subject to the same regulations.

SECTION 14: Transport information

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

Massachusetts Right To Know Components
Chemical name: Aluminum (fume or dust)
CAS number: 7429-90-5

New Jersey Right To Know Components
Common name: ALUMINUM
CAS number: 7429-90-5

Pennsylvania Right To Know Components
Chemical name: Aluminum
CAS number: 7429-90-5

New Jersey Right To Know Components
Common name: SILICON
CAS number: 7440-21-3

Pennsylvania Right To Know Components
Chemical name: Silicon
CAS number: 7440-21-3

HMIS Rating

Casweld AL	
HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	0

PERSONAL PROTECTION	D

NFPA Rating

SECTION 16: Other information

16.1 Further information/disclaimer

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