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 SDS No. SDS - Anodized Aluminum Shield Cups
 Rev:
 Date: 9/16/2022

Section 1 Identification

Product Name: Anodized Aluminum Shield Cups
Part Numbers: 71-5015, 75-5015, HT101
Recommended Use: Welding Shield Cup
Manufacturer: Camarc LLC, 39048 Webb Drive, Westland, M, 48185, USA
General Information: office@camarcwelding.us
Emergency: 313 727 5020

Section 2 Hazard(s) Identification

During normal operation and usage, this non-combustible, non-reactive, solid material article does not present inhalation, ingestion, or chemical hazards. Aluminum Shield Cups that this SDS concerns will require periodic maintenance or replacement, during which exposure to adhered hazardous contamination is possible. When this article is machined or otherwise modified by the user, dusts or fumes may be created, which may be potentially hazardous. Additionally the electrical insulation may be broken down enabling electrical arcing to occur to the Shield Cup.

Section 3 Composition / Information on Ingredients

Machined Aluminum – Anodized – 6XXX Series

Component	Percentage
Aluminum	96 – 99
Zinc	< or = .25
Manganese	< or = 0.15
Magnesium	< or = .1.2
Copper	0.15 – 0.40
Iron	0.20 – 0.70
Titanium	0.05 – 0.15
Silicon	0.40 – 0.80
Chromium	< or = .50
Exact composition will vary.	

Exposure Limits	ACGIH (TLV)		OSHA (PEL)	
	TWA mg/m3	STEL mg/m3	TWA mg/m3	CEILING mg/m3
Aluminum (Total Dust)	10	None	15	None
Aluminum (Respirable Fraction)	5	None	5	None
Zinc (oxide fume)	5	10	5	None

Zinc (Total Dust)	10	None	15	
Zinc (Respirable Dust)	None	None	5	None
Manganese	0.2	None	None	5
Magnesium (oxide – fumes)	10	None	15	None
Copper (Fume)	0.2	None	0.1	None
Copper (Dust)	1.0	None	1.0	None
Iron (Oxide Fume)	5	None	10	None
Silicon (Total Dust)	10	None	15	None
Silicon (Respirable Dust)	None	None	5	None
Chromium (Metal)	0.5	None	1.0	None

Section 4 First Aid Measures

Show this SDS to those administering medical attention or treatment.

Inhalation: If breathing has stopped, perform artificial respiration and obtain medical aid immediately. If breathing is difficult, provide fresh air and seek medical attention as soon as possible.

Skin: Cuts or abrasions should be treated promptly with thorough cleansing of the affected area. Wash the skin using soap or mild detergent and water. Get medical attention if irritation develops and persists.

Eyes: Eye injuries from solid particles should receive immediate medical attention. Dust may be flushed from eyes immediately with large amounts of water, lifting the lower and upper lids occasionally; seek medical attention.

Ingestion: If the product or dust is swallowed, seek immediate medical attention or advice. Do not induce vomiting

Section 5 Fire-Fighting Measures

Suitable Extinguishing Media:

This solid material is noncombustible. Use extinguishing media appropriate to the surrounding fire. Dry Chemical Recommended.

Special Fire Fighting Procedures:

Not applicable

Unusual Fire and Explosion Hazard:

A fire or explosion hazard is not likely but, is possible if dusts generated by grinding are present in certain combinations of particle size, dispersion, concentration, and strong ignition source.

Hazardous Combustion Products:

Temperatures above the melting point may release alloy elements and metal oxides.

Special Protective Equipment and Precautions for Fire-Fighters:

For a dust fire confined to a small area, use a respirator approved for toxic dusts and fumes. Do not use water to extinguish fires around operations involving molten metal due to the potential for steam explosions.

Section 6 Accidental Release Measures**Clean-Up Procedures:**

Product in solid form may be picked up by hand or other means to be placed into a container. When cleaning dust, use methods that minimize the dispersion of dust such as a high efficiency particulate air (HEPA) vacuum, wet dust mop, or wet clean-up. Put recovered material in a suitable, covered, and labeled container.

Personal Precautions, Protective Equipment and Emergency Procedures:

Refer to Section 8.

Environmental Precautions:

Refer to Section 12.

Section 7 Handling and Storage**Safe Handling Procedures:**

No special safety precautions required for handling prior to installation. Installation and removal of the product may cause exposure to dusts and other materials or chemicals associated with the installation (work) environment. Operations such as grinding, cutting, burning, and welding may generate dusts or fumes which may require special handling procedures. Product dust is likely combustible.

Hygienic Practices:

Wash hands thoroughly after handling, and before eating or smoking. Smoking and consumption of food or beverages should be restricted from areas where hazardous dust or chemical may be present. Do not shake clothing, rags, or other items to remove dust. Dust should be removed by laundering or vacuuming (with appropriate filters) the clothing, rags, or other items.

Conditions for Safe Storage:

Maintain good housekeeping to prevent accidental exposure to substances that could impair the quality of the product.

Section 8 Exposure Control and Personal Protection**Control parameters:**

Refer to table in Section 3 for occupational exposure limit values.

Appropriate Engineering Controls:

When machining, heating or melting, use adequate local (preferably) or general exhaust ventilation to ensure that concentrations of dusts or fumes do not exceed exposure limits. Keep workplace clean and dry (unless wet machining is being used to capture dust and fume). Train personnel to minimize exposure to hazards during installation and replacement of product. On a

regular basis, verify condition and proper function of equipment in which the product will be installed.

Individual Protection Measures:

Use appropriate gloves to protect against physical hazards. Always wear safety glasses with side shields and appropriate hearing protection when grinding or cutting. Use an approved respirator, with the proper assigned protection factor, whenever airborne concentrations of hazardous components exceed exposure limits listed in Section 3. Workers should wash before meals and leaving work.

Section 9 Physical and Chemical Properties

Appearance:	Machined Aluminum with Dark Grey Anodized finished.
Odor:	None
Melting point:	550 - 655 °C (1,050 – 1,210 °F)
Flash Point:	Not Available
Boiling point and range:	Not Available
Evaporation Rate:	Not Volatile
Flammability:	Not Flammable
Vapor Density:	Not Volatile
Density / Specific Gravity:	2.7
Vapor Pressure:	Not Available
Solubility In Water:	Insoluble

(Note – These are typical values and not an exact Specification).

Section 10 Stability and Reactivity**Reactivity:**

Not Reactive in Solid State

Chemical Stability:

Stable under normal use conditions

Possibility of hazardous reactions:

May react with strong acids. Contact of dust with strong oxidizers may cause fire or explosion.

Conditions to avoid:

Heat and Moisture.

Incompatible materials:

Strong Acids, Strong Bases, Strong Oxidizers, Water, Humidity, Alkalis. Contact with corrosive substances may produce hydrogen gas (flammable).

Hazardous decomposition products:

The melting of this product may release aluminum oxides

Section 11 Toxicology Information**Symptoms related to the physical, chemical and toxicological characteristics.**

Under normal handling and use, exposure to product presents few health hazards. Dusts may cause mechanical irritation to eyes and skin. Ingestion may cause transient irritation of throat, stomach and gastrointestinal tract. Inhalation may cause coughing, nose and throat irritation, and sneezing. Higher dust exposures may cause difficulty breathing, congestion, and chest tightness.

Delayed and immediate effects and also chronic effects from short and long term exposure

Possible effects by route of exposure:

Inhalation: Breathing metal dust may worsen symptoms of individuals with pre-existing chronic respiratory disease. Acute exposure to dust or fume may cause upper respiratory tract irritation, metallic taste in mouth, nausea, fatigue, and/or metal fume fever. Breathing metallic dust may worsen symptoms of individuals with pre-existing chronic respiratory disease.

Skin Contact: Aluminum dust can cause some irritation.

Skin Absorption:

Metal dust exposure in hot, humid atmospheres may cause skin irritation. Allergic contact dermatitis is rarely encountered.

Eye Contact: If present as dust, aluminum oxides may cause irritation, discoloration, and damage.

Ingestion: Ingestion of significant amounts of Aluminum Shield Cups is unlikely. If copper is swallowed and person is conscious, give large quantities of water to drink. Get medical attention as soon as possible. Serious effects may occur if large amounts of dust are swallowed.

Section 12 Ecological Information

Aluminum and its oxides are relatively insoluble in water and therefore have a low bioavailability. Product is not expected to present an environmental hazard. Dusts and fumes should not be released into the environment.

Section 13 Disposal Considerations

Used Product should be treated as scrap aluminum whenever possible and may be treated as General Industrial Waste is permitted by Federal, State and Local Disposal Regulations.

Section 14 Transportation Information

UN number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group number: Not applicable
Environmental hazards: Not applicable
IMDG Code: Not applicable
Transport in bulk: Not applicable
Special precautions: No special requirements are necessary in transporting this product

Section 15 Regulatory Information

This product is not classified as a health or environmental hazard under current legislation. No obligation exists to issue a safety data sheet according to REACH Art. 31.

Hazardous Material Identification System

Health Hazard	0
Flammability Hazard	0
Reactivity Hazard	0
Maximum Personal Protection	A

Section 16 Other Information

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