MATERIAL IDENTIFICATION AND USE	PELLETS	Manufacturer: Pellets LLC
		Address: 63 Industrial Drive
Material Name: Aluminum Cut Wire		N. Tonawanda, NY 14120
Products		
		Tel: 716-693-1750
		Fax: 716-693-1880
		E: info@pelletsllc.com
		Revsion Date: August 2016
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1. IDENTIFICATION				
GHS PRODUCT IDENTIFIER:	ALUMINUM METAL			
OTHER MEANS OF IDENTIFICATION:	ALUMINUM SHOT, ALUMINUM CUT WIRE SHOT, ACW			
RECOMMENDED USE OF THE CHEMICA				
	Solid aluminum cut wire products have many uses including,			
	shot blasting, tumbling, etc.			
MANUFACTURERS DETAILS:	Pellets LLC 63 Industrial Dr. N. Tonawanda, NY 14120			
PHONE & EMERGENCY NUMBER:	Phone: 716-693-1750 EMERGENCY: 716-693-1750			
2. HAZARD IDENTIFICATION				

Classification: Aluminum metal is considered an article and **NOT** hazardous in solid form. However, cetain processes such as blasting, tumbling, cutting, grinding, melting, and welding could result in some hazardous materials being emitted.

SIGNAL WORD, HAZARD STATEMENTS & SYMBOLS: Not Applicable

Precautionary Statements:

PREVENTION	FIRST AID RESPONSE
Do not breath dust/fume/gas/vapor/spray	Eyes : Flush eyes with copious amounts of water for at least
Use in well ventilated areas	15 minutes. Seek medical attention if eye irritation persits
Wash thoroughly after handling	Skin: Wash affected area with mild soap and water. Seek medical attention if skin irritation persists.
Do not eat, drink or smoke when handling this product	
	Inhalation: Remove to fresh air. Check for clear airway,
Do not handle until all safety precautions have been	breathing and presence of pulse. If necessary administer
read and understood.	CPR. Consult physician immediately.
Contaminated work clothing should not be allowed out	Ingestion: Dust may irritate mouth and gastrointestinal
of the workplace.	tract. If ingested, seek medical attention immediately.
STORAGE	DISPOSAL
Store away from acids, bases and incompatible	Aluminum metal scrap should be recycled whenever
materials	possible
Store in accordance with federal/provincinal/state or	Otherwise, dispose of in accordance with applicable
local regulations	federal/ provincinal/state or local regulations
HAZARD NOT OTHERWISE CLASSIFIED (HNOC):	Not applicable

3. COMPOSITION / INFORMATION ON INGREDIENTS

Aluminum metal is considered an article and **NOT** hazardous in solid form.

**However, cetain processes such as blasting, tumbling, cutting, grinding, melting, and welding could result in some hazardous materials being emitted.

All values are expressed as weight percent and are approximate. The percent composition reflects the range that is possible within this group of products. These are not technical specifications for a particular product.

COMPONENT	CAS NUMBER	PERCENT	
Aluminum	7429-90-5	88.0 - 99.9	
**Silicon	7440-21-3	0.10 – 4.50 max	
**Magnesium	7439-95-4	0 – 5.50 max	
**Manganese	7439-96-5	0 – 1.00 max	
**Iron	7439-89-6	0 – 0.80 max	
**Copper	7440-50-8	0 – 0.30 max	
**Titanium	7440-32-6	0 – 0.20 max	
**Chromium (Total)	7440-47-3	0 – 0.20 max	

4. FIRST AID MEASURES				
EYE CONTACT:	Flush eyes with copious amounts of water for at least 15 minutes. Seek medical			
	attention if eye irritation persits			
SKIN CONTACT:	If skin irritation develops wash affected area with mild soap and water. Seek medical attention if skin irritation persists.			
INHALATION:	Remove to fresh air. Check for clear airway, breathing and presence of pulse. If necessary administer CPR. Consult physician immediately			
INGESTION:	If significant am	ounts of dust are ingested consult a physician.		
MOST IMPORTANT SYI	MPTOMS/EFFEC	IS BOTH ACCUTE AND DELAYED:		
	**However, dur welding emitted	I as a solid is not likely to present an acute or chronic health effects. ing processing such as blasting, cutting, grinding, melting, tumbling and I byproducts may cause irritations, difficulty in breathing, coughing or also cause allergic skin reactions.		
INDICATION OF IMME	DIATE MEDICAL	ATTENTION AND SPECIAL TREATMENT, IF NECESSARY:		
	•	an: May cause sensitization by skin contact or inhalation. Treat		
	symptomatically			
	G MEASURES			
SUITABLE EXTINGUISH	ING MEDIA:	Smother and cool with a suitable dry extinguishing agent (class D fires). Do not use water if possible. Use water only when necessary, such as to cool containers exposed to fire. Extreme caution should be taken to prevent contact with molten aluminum or burning aluminum products.		
SPECIFIC HAZARDS AR	SING FROM MA	•		
		The pressure in sealed containers can increase under the influence of heat.		
HAZARDOUS COMBUSTION PRODUCTS:				
		Not applicable for a solid formed aluminum. Toxic metal and metallic oxide fumes may be evolved from fires involving finely divided aluminum.		

SPECIAL FIRE FIGHTING INSTRUCTIONS:

SPECIAL FIRE FIGHTING INSTRUCTIONS	
EXPLOSION DATA:	For solid formed aluminum, as appropriate for surrounding fire. Firefighters should wear self-contained NIOSH approved breathing apparatus and full protective clothing when fumes and/or smoke from fire is present. Do not release runoff from fire control methods to sewers or waterways. Direct water stream will scatter and spread flames; therefore, should not be used. Solid formed aluminum metal does not constitute a fire or explosion hazard. However, finely divided suspended particles may present a fire and explosion hazard in the presence of an ignition source.
6. ACCIDENTAL RELEASE MEASU	JRES
PERSONAL PRECAUTIONS, PROTECTIVE	EQUIPMENT AND EMERGENCY PROCEDURES: Not applicable to aluminum metal in solid state. Avoid dust formation. Ensure adequate ventilation. Clean-up personnel should be protected against inhalation and eye and skin contact.
ENVIRONMENTAL PRECAUTIONS:	Do not release into sewers or waterways.
METHODS AND MATERIALS FOR CONT	AINMENT AND CLEANING UP:
	Not applicable for aluminum metal in solid state. For spills involving fine dusts, remove by vacuuming with HEPA filter or wet sweeping methods to prevent spread of dust. Avoid inhalation of dust.
7. HANDLING AND STORAGE	
PRECAUTIONS OF SAFE HANDLING:	Not applicable to aluminum metal in solid state. Operations with the potential for generating high concentrations of airborne particles should be evaluated and controlled as necessary. Avoid breathing metal fumes/ or dust. Practice good housekeeping as cut wire can be a safety hazard under foot due to its shape. Spills should be cleaned from floors immediately. Be alert to sharp edges and unsecured lifts. Observe maximum floor loading limits as aluminum cut wire is dense and weighs approximately 160 lbs per cubic foot.

CONDITIONS FOR SAFE STORAGE: Store in a cool well ventilated area. Keep away from heat. Inspect periodically for damage or leaks. Store away from incompatible materials (acids, bases and oxidizers)

INCOMPATIBLE PRODUCTS: Store away from acids, bases, oxidizers and incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters: ** There are no exposure limits for aluminum alloy metal. Aluminum metal is considered an article and **NOT** hazardous in solid form. However, cetain processes such as blasting, tumbling, cutting, grinding, melting, and welding could result in some hazardous materials being emitted. <u>The following</u> <u>classification information is for the hazardous elements which may be emitted</u> <u>during these processes</u>.

COMPONENTS	CAS Number	OSHA PEL (MG/M ³)	ACGIH TLV (MG/M ³)
Aluminum	7429-90-5	15.0 mg/m ³ (as total dust) 5.0 mg/m ³ (as respirable fraction)	5.0 mg/m ³ (Dust/Fume)
**Silicon	7440-21-3	5.0 mg/m ³ (as respirable fraction)	3.0 mg/m ³ (Dust/Fume)
**Magnesium	7439-95-4	5.0 mg/m ³ (as respirable fraction)	3.0 mg/m ³ (Dust/Fume)
**Manganese	7439-96-5	5.0 mg/m ³ (as respirable fraction)	0.2 mg/m ³ (Inhalation fume)
**Iron	7439-89-6	5.0 mg/m ³ (as respirable fraction)	5.0 mg/m ³ (Dust/Fume)
**Copper	7440-50-8	1.0 mg/m ³ (as respirable fraction)	1.0 mg/m ³ (Dust/Fume)
**Titanium	7440-32-6	5.0 mg/m ³ (as respirable fraction)	5.0 mg/m ³ (Dust/Fume)
**Chromium (Total)	7440-47-3	1.0 mg/m ³ (as respirable metal)	0.5 mg/m ³ (as respirable metal)

Note: Additional air makeup systems may be required if local exhaust or ventilation systems are not sufficient to maintain exposure levels of contaminants below prescribed limits. When inhalation controls are not sufficient to reduce the exposure to below the applicable exposure limit then use OSHA/NIOSH approved respiratory protection within the limitations of the respirator. OSHA PEL's and Threshold Limit Values (TLV) established by the Occupational Health and Safety Administration and the American conference of Governmental Industrial Hygienists (ACGIH) are 8 hour time weighted average concentrations unless otherwise noted.

APPROPRIATE ENGINEERING CONTROLS:	Local and general exhaust ventilation should be used to keep worker exposure below exposure limits during blasting, tumbling, welding, cutting, grinding, machining and other processes which may generate airborne contaminants.
INDIVIDUAL PROTECTIVE MEASURES:	Dependent upon process being performed on/with material. Each operation must be evaluated for suitable equipment prior to using material.
GLOVES:	Suitable for protection against any physical injury and skin contact during handling.
EYES:	Safety glasses or goggles should be worn when there is possibility of flying particles or elevated levels of dust or fume.
CLOTHING:	Appropriate work clothing as determined by user
RESPIRATOR:	If concentrations exceed established limits use NIOSH/OSHA approved particulate respirators (dust & fume or high efficiency dust and fume)
FOOTWARE OTHER:	Steel toe work boots recommended or as determined by user $\ensuremath{N/A}$

9. CHEMICAL AND PHYSICAL PROPERTIES				
PHYSICAL STATE	Solid	APPEARANCE	Solid Silver/Grey Metallic	
ODOR	Odorless	ODOR THRESHOLD	Not Applicable	
Ph	Not Applicable	MELTING POINT	1060 - 1175 Degrees F	
BOILING POINT	Not Applicable	FLASH POINT	Not Applicable	
EVAPORATION RATE	Not Applicable	FLAMABILITY (SOLID, GAS)	Not flammable	
UPPER FLAMMABLE LIMIT %	Not Applicable	LOWER FLAMABLE LIMIT	Not Applicable	
VAPOR PRESSURE	Not Applicable	VAPOR DENSITY	Not Applicable	
RELATIVE DENSITY	Not Applicable	SPECIFIC GRAVITY	.097 lbs/in ³	
SOLUBILITY	Not Applicable	PARTICIAN COEFFICIENT	No data	
AUTO IGNITION TEMP	Not Applicable	DECOMPOSITON TEMP.	No data	
VISCOSITY	Not Applicable			
OTHER INFO	Not Applicable			

10. STABILITY AND REACTIVITY				
REACTIVITY:	Not determined for product in solid form			
CHEMICAL STABILITY:	Stable under normal conditions of transport, storage and use for solid formed product.			
POSSIBILITY OF HAZARDOUS F	REACTIONS: Hazardous polymerization will not occur			
CONDITIONS TO AVOID:	Avoid direct sources of heat. Avoid contact with acid, bases and oxidizers which can result in the release of flammable hydrogen gas. Avoid dust formation.			
INCOMPATIBEL MATERIALS:	Acids, bases and oxidizers			
HAZARDOUS DECOMPOSITIO	N PRODUCTS: During certain operations such as blasting, tumbling, welding, burning, melting metal dust/fumes (aluminum alloy oxides) may be generated.			

11. TOXILOGICAL INFORMATION

Note: Aluminum metal is considered an article and not hazardous in solid form. However, cetain processes such as blasting, tumbling, cutting, grinding, melting, and welding could result in some hazardous materials being emitted. <u>The following toxicology information has been determined for Aluminum Metal</u> by using the information available for its components applied to the guidance on the preparation of an SDS under GHS rrequirements of OSHA and the EU CPL:

COMPONENT	LD ₅₀ ORAL	LD ₅₀ DERMAL	LD ₅₀ INHALATION	OTHER
Aluminum Metal	NE	NE	NE	NE

NE – None Established

LIKELY ROUTES OF ENTRY:

EYES:	High concentrations of dust may cause irritation to eyes.
SKIN:	Prolonged skin contact with dust may cause skin irritation to sensitive
	individuals.

11. TOXILOGICAL INFORMATION - CONTINUED

SYMPTOMS RELATED TO THE PH	Inhalation of aluminum metal particulate or elemental oxide fumes generated during, blasting, tumbling, welding, burning, melting, grinding or machining may pose acute or chronic health effects. YSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS: None for aluminum metal in its natural solid state
(D THE MATERIAL: <u>Aluminum</u> : Inhalation overexposure to aluminum may cause metal fume fever characterized by fever and chills (flu like symptoms) with metallic taste which appear 4-6 hours after exposure with no long term effects.
; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	TO THE MATERIAL: <u>Aluminum</u> : There is no chronic form of metal fume fever, but in rare instances an acute incident may be followed by complaints of bronchitis or pneumonia. Some workers have developed a short-term immunity (resistance) so that repeated exposure to aluminum oxide does not cause metal fume fever. This immunity is quickly lost after short absences from work (vacations/weekends). Prolonged or repeated skin contact with aluminum dust or powder may cause dryness, irritation and cracking (dermatitis). Aluminum is not listed as a human carcinogen by OSHA, the National Toxicology Program (NTP), and the International Agency for Research on Cancer (IARC), the American Conference of Governmental Industrial Hygienists (ACGIH) or the European Union (EU).
SPECIFIC TARGET ORGAN TOXICI	TY (STOT) – SINGLE EXPOSURE: No data for aluminum metal
SPECIFIC TARGET ORGAN TOXICI	TY (STOT) – REPEATED EXPOSURE: No data for aluminum metal
MUTAGENICITY OF MATERIAL:	No data for aluminum metal
REPRODUCTIVE EFFECTS:	No data for aluminum metal
TERATOGENICITY OF MATERIAL:	Not applicable for aluminum metal
CARCINOGENICITY OF MATERIAL	.: <u>Aluminum:</u> Aluminum is not listed as a human carcinogen by OSHA, the National Toxicology Program (NTP), and the International Agency for Research on Cancer (IARC), the American Conference of Governmental Industrial Hygienists (ACGIH) or the European Union (EU).
SYNERGISTIC OF MATERIALS:	Not applicable for aluminum metal
ASPIRATION HAZARD	No data for aluminum metal
SENSITIZATION OF MATERIAL:	No data for aluminum metal
LD ₅₀ OF MATERIAL:	None established for aluminum metal

11. TOXILOGICAL INFORMATION - CONTINUED

LC ₅₀ OF MATERIAL:	None established for aluminum metal
REFERENCES:	International Agency for Research on Cancer (IARC) summaries & evaluation (2008).
12. ECOLOGICAL INFORMATION	
ECOTOXICITY (aquatic & terrestrial):	No data available as shipped or sold. Aluminum metal is not an environmental hazard, processing may lead to the release of aluminum compounds in bioavailable forms generated from use of aluminum metal in processing.
PERSISTENCE AND DEGRADABILITY:	No data available as shipped or sold
BIOACCUMULATIVE POTENTIAL:	No data available as shipped or sold
MOBILITY ON SOIL:	Not applicable as shipped or sold
ADDITIONAL INFORMATION:	Hazard Category:Not applicable as shipped or soldHazard Symbol:Not applicable as shipped or soldHazard Statement:Not applicable as shipped or soldSignal Word:Not applicable as shipped or sold
13. DISPOSAL CONSIDERATIONS	
WASTE DISPOSAL METHODS:	Aluminum scrap should be recycled whenever possible
CONTAINER CLEANING AND DISPOSAL:	Recycle whenever possible. Dispose of in accordance with applicable federal, provincial/state or local regulations.
14. TRANSPORTATION INFORMAT	ΓΙΟΝ
GENERAL SHIPPING INFORMATION:	Aluminum metal is not regulated for shipping.
SHIPPING NAME AND DESCRIPTION:Non-regulated materialUN NUMBER:Non-regulated materialHAZARD CLASS:Non-regulated material	

PACKAGING GROUP/RISK GROUP: Not applicable TRANSPORT REGUALTIONS: Canadian Transportation of Dangerous Goods Regulations (TDG) March 2011 US Department of Transportation (DOT) Hazardous materials shipping regulations (Title 49 – Transportation March 2011)

Note: Aluminum metal does not have a Transport Dangerous Goods (TDG) classification.

15. REGULATORY INFORMATION

Note: Aluminum metal is considered an article and not hazardous in solid form. However, cetain processes such as blasting, tumbling, cutting, grinding, melting, and welding could result in some hazardous materials being emitted. **<u>The following regulatory information is for the hazardous elements which may be emitted during the above processes.</u>

REGULATORY INFORMATION:

The following listing of regulation relative to Pellets LLC products may not be complete and should not be solely replied upon for all regulatory compliance responsibilities.

OSHA REGULATIONS:

Air contaminant (29 CFR 1910.1000, Table Z-1, Z-2, Z-3): This product as a whole is listed. Refer to SECTION 8, Exposure Controls and Personal Protection of this document.

CHEMICAL NAME	SARA 302 (40 CFR 355, APENDIX A)	SARA 304 (40 CFR TABLE 302.4)	SARA 313 (40 CFR 372.65)	CERCLA REPORTABLE QUANTITIES
Aluminum as (Fume or Dust)	No	No	Yes	No

EPCRA SECTION 302/304 EXTREMELY HAZARDOUS SUBSTANCES: No

EPCRA SECTION 311/312 HAZARD CATEGORIES: No Hazard categories apply

EPCRA SECTION 313 Toxic Release Inventory:	This product does contain aluminum alloy metal by weight not subject to Toxic Release Reporting requirements. Potential by-products from working with this product – **Aluminum (fume or dust) CAS 7429-90-5 are reportable. Other components in Aluminum alloy may potentially be subject to reporting if generated in use of this material: Manganese, Copper, and Chromium.
CERCLA REPORTABLE QTY (RQ) Sec 103:	Aluminum is not listed and reporting is not required when diameter of the pieces of solid metal released is equal to or exceeds 100 micrometers (0.004 inches).
TSCA INVENTORY STATUS:	The components of this material are listed on the Toxic Substance Control Act Inventory.
STATE REGULATIONS:	The product aluminum metal as a whole is not listed in any state regulations. However, individual components of the products may be listed in various state regulations.
CANADIAN REGULATIONS: INGREDIENTS LISTED ON THE DOMESTIC SUBSTANCE LIST:	YES
WHMIS CLASSIFICATION:	Not applicable as Aluminum metal is not a controlled product
	under Controlled Products Regulation (CPR)
EUROPEAN UNION:	
LISTED ON THE EUROPEAN INVENTORY	

15. REGULATORY INFORMATION - CONTINUED

OF EXISTING COMMERICAL CHEMICAL SUBSTANCES (EINECS): EU GHS CLP CLASSIFICATION:	YES Aluminum metal is not classified
REFERENCES:	
RCRA	Resource Conservation Recovery Act (42 USC Sec. 6921; 40CFR Part 261 APP VIII)
SARA	Superfund Amendments and Reauthorization Act 1986 Title III Sec 302 Extremely Hazardous Substances (42 USC Secs. 11023,13106; 40 CFR sec. 372.65) and Section 313 Toxic Chemicals (42 USC secs. 11023, 13106;40 CFR Sec. 372.65 [as of 6-30-05])
TSCA	Toxic Substance Control Act (15 USC s/s2601 et seq [1976])
SDWA	Safe Drinking Water Act (42 USC s/s's 300f et sec. [1974])
CAA	Clean Air Act (42 USC Sec. 7412; 40 CFR Part 61 (As of 8-18-06)
CWA	Clean Water Act (33 USC Secs. 1311;1314(b), (c), (e), (g); 136(b), (c), 137(b) [as of 8-2-06])
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act (42 USC Secs. 9601(14, 9603(a); 40 CFR Sec. 302.4, table 302.4 and App A)

16. OTHER INFORMATION

Aluminum metal

HAZARD LABEL RATING SYSTEM:

NATIONAL FIRE PROTECTION CODE:

NFPA $H=0^*$ F=0 R=0

*Denotes possible chronic health hazard, if airborne dusts and fumes are generated



HAZARDOUS MATERIALS IDENTIFICATION SYSTEM:

HMIS CODE: H=0* F=0 R=0 PPE (SEE SECTION 8)

*Denotes possible chronic health hazard, if airborne dusts and fumes are generated

HEALTH	0*
FLAMMABILITY	0
REACTIVITY	0
OTHER	

16. OTHER INFORMATION - CONTINUED

PREPARED BY: PELLETS LLC

The information and recommendations in this safety data sheet are, to the best of our knowledge, accurate as of the date of issue. Nothing herein shall be deemed to create warranty, expressed or implied, and shall not establish a legally valid contractual relationship. It is the responsibility of the user to determine applicability of this information and the suitability of the material or product for any particular purpose or application. Therefore, your specific use of this product should be evaluated to determine if additional precautions are required.

ABBREVIATIONS AND ACRONYMS:

DOT:	US Dept. of Transportation
ACGIH:	American Conference of Governmental Industrial Hygienists.
CAS:	Chemical Abstract Service (Division of American Chemical Society)
NFPA:	National Fire Protection Association (USA)
HMIS:	Hazardous Materials Identification System (USA)
LC ₅₀ :	Lethal concentration – 50 percent
LD ₅₀ :	Lethal dose – 50 percent