

Section 4 – First-aid Measures

4(a) Description of necessary measures:

- **Inhalation:** EA 6026LF Alloy as sold/shipped is not a likely form of exposure.
- **Eye Contact:** EA 6026LF Alloy as sold/shipped is not a likely form of exposure.
- **Skin Contact:** EA 6026LF Alloy as sold/shipped is not a likely form of exposure.
- **Ingestion:** EA 6026LF Alloy as sold/shipped is not a likely form of exposure.

4(b) Most important symptoms/effects, acute and delayed (chronic):

- **Inhalation:** EA 6026LF Alloy as sold/shipped is not likely to present an acute or chronic health effect.
- **Eye:** EA 6026LF Alloy as sold/shipped is not likely to present an acute or chronic health effect.
- **Skin:** EA 6026LF Alloy as sold/shipped is not likely to present an acute or chronic health effect.
- **Ingestion:** EA 6026LF Alloy as sold/shipped is not likely to present an acute or chronic health effect.

However, during further processing (welding, grinding, burning, etc.) individual components may illicit an acute or chronic health effect. Refer to Section 11-Toxicological Information.

4(c) Immediate Medical Attention and Special Treatment: None Known

Section 5 – Fire-fighting Measures

5(a) Suitable (and unsuitable) Extinguishing Media: Not Applicable for EA 6026LF Alloy as sold/shipped. Use extinguishers appropriate for surrounding materials.

5(b) Specific Hazards arising from the chemical: Not Applicable for EA 6026LF Alloy as sold/shipped. When burned, toxic smoke, fume and vapor may be emitted.

5(c) Special protective equipment and precautions for fire-fighters: Self-contained NIOSH approved respiratory protection and full protective clothing should be worn when fumes and/or smoke from fire are present. Heat and flames cause emittance of acrid smoke and fumes. Do not release runoff from fire control methods to sewers or waterways. Firefighters should wear full face-piece self-contained breathing apparatus and chemical protective clothing with thermal protection. Direct water stream will scatter and spread flames and, therefore, should not be used.

Section 6 - Accidental Release Measures

6(a) Personal Precautions, Protective Equipment and Emergency Procedures: Not Applicable for EA 6026LF Alloy as sold/shipped. For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin. If material is in a dry state, avoid inhalation of dust.

6(b) Methods and materials for containment and clean up: Not Applicable for EA 6026LF Alloy as sold/shipped. Collect material in appropriate labeled containers for recovery or disposal in accordance with federal, state, and local regulations. Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal requirements.

Section 7 - Handling and Storage

7(a) Precautions for safe handling: Not Applicable for EA 6026LF Alloy as sold/shipped, however further processing (welding, burning, grinding, etc.) with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Avoid breathing metal fumes and/or dust. Do not eat, drink or smoke when using this product. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves/protective clothing/eye protection/face protection Cut resistant gloves and sleeves should be worn when working with steel products.

7(b) Conditions for safe storage, including any incompatibilities: Store away from acids and incompatible materials.

Section 8 - Exposure Controls / Personal Protection

8(a) Occupational Exposure Limits (OELs): EA 6026LF Alloy as sold/shipped in its physical form does not present an inhalation, ingestion or contact hazard, nor would any of the following exposure data apply. However, operations such as burning, welding (high temperature), sawing, brazing, machining, grinding, etc. may produce fumes and/or particulates. The following exposure limits are offered as reference for an experienced industrial hygienist to review.

Ingredients	OSHA PEL ¹	ACGIH TLV ²	NIOSH REL ³	IDLH ⁴
Aluminum	15 mg/m ³ (as aluminum oxide, metal & insoluble compounds, total dust) 5.0 mg/m ³ (as aluminum oxide, metal & insoluble compounds, respirable fraction)	1.0 mg/m ³ (as metal & insoluble compounds, respirable fraction ⁵)	10 mg/m ³ (as metal & insoluble compounds, total dust) 5.0 mg/m ³ (as metal & insoluble compounds, respirable fraction) 5.0 mg/m ³ (as welding fumes & pyro powders)	NE
Bismuth	NE	NE	NE	NE
Silicon	15 mg/m ³ (total dust) 5.0 mg/m ³ (as respirable fraction)	NE	10 mg/m ³ (as total dust) 5.0 mg/m ³ (as respirable dust)	NE

Section 8 - Exposure Controls / Personal Protection (continued)

8(a) Occupational Exposure Limits (OELs):

Ingredients	OSHA PEL ¹	ACGIH TLV ²	NIOSH REL ³	IDLH ⁴
Magnesium	15 mg/m ³ (as magnesium oxide fume, total particulate)	10 mg/m ³ (as magnesium oxide, inhalable fraction ⁶)	NE	750 mg/m ³ (as magnesium oxide fume)
Manganese	“C” 5.0 mg/m ³ (as fume & inorganic compounds, as Mn)	0.02 mg/m ³ (as fume & inorganic compounds, as Mn, respirable fraction) 0.1 mg/m ³ (as fume & inorganic compounds, as Mn, inhalable fraction)	1.0 mg/m ³ (as fume & inorganic compounds, as Mn) “STEL” 3.0 mg/m ³ (as fume & inorganic compounds, as Mn)	500 mg/m ³ (as Mn)
Lead	0.05 mg/m ³ (inorganic compounds, as Pb) ⁷ “AL” 0.03 mg/m ³	0.05 mg/m ³ (inorganic compounds, as Pb)	0.05 mg/m ³ (inorganic compounds, as Pb) ⁸	100 mg/m ³

NE - None Established

1. OSHA PELs (Permissible Exposure Limits) are 8-hour TWA (time-weighted average) concentrations unless otherwise noted. A (“C”) designation denotes a ceiling limit, which should not be exceeded during any part of the working exposure unless otherwise noted. A Short Term Exposure Limit (STEL) is defined as a 15-minute exposure, which should not be exceeded at any time during a workday. An Action level (AL) is used by OSHA and NIOSH to express a health or physical hazard. They indicate the level of a harmful or toxic substance/activity, which requires medical surveillance, increased industrial hygiene monitoring, or biological monitoring. Action Levels are generally set at one half of the PEL but the actual level may vary from standard to standard. The intent is to identify a level at which the vast majority of randomly sampled exposures will be below the PEL.
2. Threshold Limit Values (TLV) established by the American Conference of Governmental Industrial Hygienists (ACGIH) are 8-hour TWA concentrations unless otherwise noted. ACGIH TLVs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes. DSEN – May cause dermal sensitization. This notation is used to indicate the potential for dermal sensitization resulting from the interaction of an absorbed agent and ultraviolet light (i.e. photosensitization). RSEN – May cause respiratory sensitization.
3. The National Institute for Occupational Safety and Health Recommended Exposure Limits (NIOSH-REL)- Compendium of Policy and Statements. NIOSH, Cincinnati, OH (1992). NIOSH is the federal agency designated to conduct research relative to occupational safety and health. As is the case with ACGIH TLVs, NIOSH RELs are for guideline purposes only and as such are not legal, regulatory limits for compliance purposes.
4. The “immediately dangerous to life or health air concentration values (IDLHs)” are used by NIOSH as part of the respirator selection criteria and were first developed in the mid-1970’s by NIOSH. The Documentation for Immediately Dangerous to Life or Health Concentrations (IDLHs) is a compilation of the rationale and sources of information used by NIOSH during the original determination of 387 IDLHs and their subsequent review and revision in 1994. Ca is designated as carcinogen.
5. Respirable fraction. The concentration of respirable dust for the application of this limit is to be determined from the fraction passing a size-selector with the characteristics defined in ACGIH 2022 TLVs[®] and BEIs[®] Appendix D, paragraph C.
6. Inhalable fraction. The concentration of inhalable particulate for the application of this TLV is to be determined from the fraction passing a size-selector with the characteristics defined in the ACGIH 2023 TLVs[®] and BEIs[®] (Biological Exposure Indices) Appendix D, paragraph A.
7. OSHA considers “Lead” to mean metallic lead, all inorganic lead compounds (lead oxides and lead salts), and a class of organic compounds called soaps; all other lead compounds are excluded from this definition. The OSHA PEL and other OSHA requirements can be found in 29 CFR 1910.1025. The OSHA PEL (8-hour TWA) for lead in “non-ferrous foundries with less than 20 employees” is 0.075 mg/m³.
8. NIOSH considers “Lead” to mean metallic lead, lead oxides, and lead salts (including organic salts such as lead soaps but excluding lead arsenate). The NIOSH REL for lead (8-hour TWA) is 0.05 mg/m³; air concentrations should be maintained so that worker blood lead remains less than 0.060 mg Pb/100 g of whole blood.

8(b) Appropriate Engineering Controls: Use controls as appropriate to minimize exposure to metal fumes and dusts during handling operations. Provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust is necessary for use in enclosed or confined spaces. Provide sufficient general/local exhaust ventilation in pattern/volume to control inhalation exposures below current exposure limits.

8(c) Individual Protection Measures:

- **Respiratory Protection:** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determine the extent of respiratory protection needed. Half-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 10 times the exposure limit. Full-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 50 times the exposure limit. Protection by air-purifying negative-pressure and powered air respirators is limited. Use a positive-pressure-demand, full-face, supplied air respirator or self-contained breathing apparatus (SCBA) for concentrations above 50 times the exposure limit. If exposure is above the IDLH (Immediately dangerous to life or health) for any of the constituents, or there is a possibility of an uncontrolled release or exposure levels are unknown, then use a positive-demand, full-face, supplied air respirator with escape bottle or SCBA.

Warning! Air-purifying respirators both negative-pressure and powered-air do not protect workers in oxygen-deficient atmospheres.

- **Eyes:** Wear appropriate eye protection to prevent eye contact. For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use safety glasses to prevent eye contact. Contact lenses should not be worn where industrial exposure to this material are likely. Use safety glasses or goggles as required for welding, burning, sawing, brazing, grinding or machining operations.
- **Skin:** Wear appropriate personal protective clothing to prevent skin contact. Cut resistant gloves and sleeves should be worn when working with steel products. For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use protective clothing, and gloves to prevent skin contact. Protective gloves should be worn as required for welding, burning or handling operations. Contaminated work clothing must not be allowed out of the workplace.
- **Other protective equipment:** An eyewash fountain and deluge shower should be readily available in the work area.

Section 9 - Physical and Chemical Properties

9(a) Appearance (physical state, color, etc.): Solid, Metallic, Silver, Gray	9(j) Upper/lower Flammability or Explosive Limits: NA
9(b) Odor: Odorless	9(k) Vapor Pressure: NA
9(c) Odor Threshold: NA	9(l) Vapor Density (Air = 1): NA
9(d) pH: NA	9(m) Relative Density: 2.75 g/cm ³
9(e) Melting Point/Freezing Point: 650 °C / 1,202 °F	9(n) Solubility(ies): Insoluble
9(f) Initial Boiling Point and Boiling Range: ND	9(o) Partition Coefficient n-octanol/water: NA
9(g) Flash Point: NA	9(p) Auto-ignition Temperature: NA
9(h) Evaporation Rate: NA	9(q) Decomposition Temperature: ND
9(i) Flammability (solid, gas): Non-flammable, non-combustible	9(r) Viscosity: NA

NA - Not Applicable
ND - Not Determined for product as a whole

Section 10 - Stability and Reactivity

10(a) Reactivity: Not Determined (ND) for product in a solid form. Do not use water on molten metal.

10(b) Chemical Stability: Steel/Aluminum products are stable under normal storage and handling conditions.

10(c) Possibility of hazardous reaction: None Known

10(d) Conditions to Avoid: Storage with strong acids or calcium hypochlorite.

10(e) Incompatible Materials: Will react with strong acids to form hydrogen. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.

10(f) Hazardous Decomposition Products: Thermal oxidative decomposition of steel products can produce fumes containing oxides of iron and manganese as well as other alloying elements.

Section 11 - Toxicological Information

11 Information on toxicological effects: The following toxicity data has been determined for EA 6026LF Alloy when further processed using the information available for its components applied to the guidance on the preparation of an SDS under the GHS requirements of OSHA and the EU CPL:

Hazard Classification	Hazard Category		Hazard Symbols	Signal Word	Hazard Statement
	EU	OSHA			
STOT following Repeated Exposure (covers Categories 1 and 2)	NR	1 ^j		Warning	Causes damage to lungs and central nervous system through prolonged or repeated inhalation exposure.
Reproductive Toxicity	NR	1 ^h		Danger	May damage fertility or the unborn child.

Toxicological data listed below are presented regardless of classification criteria. Individual hazard classification categories where the toxicological information has met or exceeded a classification criteria threshold are listed above.

- No LC₅₀ or LD₅₀ has been established for EA 6026LF Alloy as a mixture or its components. The following data has been determined for the components:
 - Manganese:** Rat LD₅₀ > 2000 mg/kg (REACH)
Rat LD₅₀ > 9000 mg/kg (NLM Toxnet)
 - Silicon:** LD₅₀ = 3160 mg/kg (Oral/Rat)
- No Skin (Dermal) Irritation data available for EA 6026LF Alloy as a mixture. The following Skin (Dermal) Irritation information was found for the components:
 - Magnesium Dioxide:** Severe skin irritant in human (HSDB).
- No Eye Irritation data available for EA 6026LF Alloy as a mixture. The following Eye Irritation information was found for the components:
 - Magnesium dioxide:** Severe eye irritant in human (HSDB).
 - Silicon:** Slight eye irritation in rabbit protocol.
- No Skin (Dermal) Sensitization data available for EA 6026LF Alloy as a mixture or its components.
- No Respiratory Sensitization data available for EA 6026LF Alloy as a mixture or its components.
- No Germ Cell Mutagenicity data available for EA 6026LF Alloy as a mixture or its components.

Section 11 - Toxicological Information (continued)**11 Information on toxicological effects (continued):**

f. Carcinogenicity: IARC, NTP, and OSHA do not list EA 6026LF Alloy as carcinogens. The following Carcinogenicity information was found for the components:

- **Aluminum (metal and insoluble compounds):** IARC-1 (production), carcinogen to humans; ACGIH TLV-A4, not classifiable as a human carcinogen
- **Welding Fumes:** IARC-1, carcinogen to humans; NIOSH-Ca, potential occupational carcinogen humans; ACGIH TLV-A3, confirmed animal carcinogen with unknown relevance to humans; NIOSH-Ca, potential occupational carcinogen
- **Lead (inorganic compounds, as Pb):** IARC-2A (inorganic compounds), probably carcinogenic to humans, and IARC-2B, possibly carcinogenic to humans; ACGIH-A3, confirmed animal carcinogen with unknown relevance to humans; NTP-R, reasonably anticipated to be a human carcinogen (RAHC); EPA-B2, probable human carcinogen, sufficient evidence from animal studies; inadequate evidence or no data from epidemiologic studies.
- **Manganese (inorganic compounds, as Mn):** ACGIH TLV-A4, not classifiable as a human carcinogen; EPA-D, not classifiable as to human carcinogenicity (CBD, cannot be determined)
- **Manganese (fume, as Mn):** EPA-D, not classifiable as to human carcinogenicity (CBD, cannot be determined).

g. No Toxic Reproduction data available for EA 6026LF Alloy as a mixture or its components. The following Reproductive Toxicity information was found for the components:

- **Lead:** Birth weight, size and effects on testis. Reproductive, endocrine and growth effects have been reported.

h. No Specific Target Organ Toxicity (STOT) following a Single Exposure data available for EA 6026LF Alloy as a mixture or its components

i. No Specific Target Organ Toxicity (STOT) following Repeated Exposure data was available for EA 6026LF Alloy as a mixture. The following STOT following Repeated Exposure data was found for the components:

- **Manganese:** Inhalation of metal fumes - Degenerative changes in human Brain; Behavioral: Changes in motor activity and muscle weakness (Whitlock *et al.*, 1966).
- **Lead:** Rat Oral 6 mo NOEL 0.0015 mg/kg CNS Testes and Kidney Effects. Rat inhalation – immunosuppression, Dermal – percutaneous absorption.
- **Aluminum (metal and insoluble compounds):** Repeated exposure associated with Asthma, Fibrosis in lungs and encephalopathy in humans.

The above toxicity information was determined from available scientific sources to illustrate the prevailing posture of the scientific community. The scientific resources includes: The American Conference of Governmental Industrial Hygienist (ACGIH) Documentation of the Threshold Limit Values (TLVs) and Biological Exposure indices (BEIs) with Other Worldwide Occupational Exposure Values 2023, The International Agency for Research on Cancer (IARC), The National Toxicology Program (NTP) updated documentation, the World Health Organization (WHO) and other available resources, the International Uniform Chemical Information Database (IUCLID), European Union Risk Assessment Report (EU-RAR), Concise International Chemical Assessment Documents (CICAD), European Union Scientific Committee for Occupational Exposure Limits (EU-SCOEL), Agency for Toxic Substances and Disease Registry (ATSDR), Hazardous Substance Data Bank (HSDB), and International Programme on Chemical Safety (IPCS), European Union Classification, Labeling and Packaging (EU CPL), Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), International Uniform Chemical Information Database (IUCLID), TOXicology Data NETwork (TOXNET), European Risk Assessment Reports (EU RAR).

The following health hazard information is provided regardless to classification criteria and is based on the individual component(s) and potential resultant components from further processing:

Acute Effects:

- **Inhalation:** Excessive exposure to high concentrations of metal dust may cause irritation to the eyes, skin and mucous membranes of the upper respiratory tract. Excessive inhalation of fumes of freshly formed metal oxide particles sized below 1.5 micrometer and usually between 0.02-0.05 micrometers from many metals can produce an acute reaction known as “metal fume fever”. Symptoms consist of chills and fever (very similar to and easily confused with flu symptoms), metallic taste in the mouth, dryness and irritation of the throat followed by weakness and muscle pain. The symptoms come on in a few hours after excessive exposure and usually last from 12 to 48 hours. Long-term effects from metal fume fever have not been noted. Freshly formed oxide fumes of manganese and copper have been associated with causing metal fume fever.
- **Eye:** Excessive exposure to high concentrations of metal dust may cause irritation to the eyes.
- **Skin:** Skin contact with metal dusts may cause irritation or sensitization, possibly leading to dermatitis. Skin contact with metallic fumes and dusts may cause physical abrasion.
- **Ingestion:** Ingestion of harmful amounts of this product as distributed is unlikely due to its solid insoluble form. Ingestion of metal dust may cause nausea or vomiting.

Acute Effects by component:

- **Aluminum and Aluminum oxide:** Inhalation may cause cough.
- **Bismuth:** Not rated/Not classified.
- **Silicon and Silicon Oxides:** May be harmful if swallowed.
- **Magnesium and Magnesium Oxide:** Headache, cough, sweating, nausea and fever may be caused by exposure to freshly formed fumes. The symptoms of metal fume fever do not become manifest until 4-12 hours after exposure.
- **Manganese and Manganese Oxide:** Manganese and Manganese oxide are harmful if swallowed.
- **Lead and lead oxides:** Acute exposure to lead can be manifested as abdominal pain, nausea, constipation, anorexia, or vomiting; and, in severe cases coma or death.

Delayed (chronic) Effects by component:

- **Aluminum Oxide:** Considered to be an inert or nuisance dust.

Section 11 - Toxicological Information (continued)

Delayed (chronic) Effects by component (continued):

- **Bismuth:** Data show that inhalation of dusts or small particles of Bismuth may have toxic consequences in lungs and kidneys at low doses. Therefore, a conservative approach should limit exposure to respirable forms of bismuth.
- **Silicon and silicon oxides:** Silicon dusts are a low health risk by inhalation and should be treated as a nuisance dust. Eye contact with pure material can cause particulate irritation. Skin contact with silicon dusts may cause physical abrasion.
- **Magnesium and Magnesium Oxide:** Irritation of eyes, nose, and throat. Symptoms may include dryness of nose and mouth, cough, feeling of weakness, tightness of chest, muscular pain, chills, fever, headache, nausea, and vomiting.
- **Manganese and Manganese Oxides:** Chronic exposure to high concentrations of manganese fumes and dusts may adversely affect the central nervous system with symptoms including languor, sleepiness, weakness, emotional disturbances, spastic gait, mask-like facial expression and paralysis. Animal studies indicate that manganese exposure may increase susceptibility to bacterial and viral infections. Occupational overexposure (Manganese) is a progressive, disabling neurological syndrome that typically begins with relatively mild symptoms and evolves to include altered gait, fine tremor, and sometimes, psychiatric disturbances. May cause damage to lungs with repeated or prolonged exposure. Neurobehavioral alterations in worker populations exposed to manganese oxides include: speed and coordination of motor function are especially impaired.
- **Lead and Lead Oxides:** Lead compounds can be toxic when ingested or inhaled. Lead is a cumulative poison. The predominant effects of excessive exposure are anemia, nervous system disorders, and kidney damage. Nervous system disorders may be displayed as irritability, headaches, insomnia, convulsions, muscular tremors, or palsy of the extremities. Excessive exposure can have adverse effects on human reproduction. Lead interferes with normal function of the adult and developing central nervous system in humans. Lead interferes with different enzyme systems. For this reason many organs or organ systems are potential targets for lead. Lead can damage fertility or the unborn child.

Section 12 - Ecological Information

12(a) Ecotoxicity (aquatic & terrestrial): No Data Available for EA 6026LF Alloy as sold/shipped.

12(b) Persistence & Degradability: No Data Available for EA 6026LF Alloy as sold/shipped or individual components.

12(c) Bioaccumulative Potential: No Data Available for EA 6026LF Alloy as sold/shipped or individual components.

12(d) Mobility (in soil): No data available for EA 6026LF Alloy as sold/shipped. However, individual components of the product have been found to be absorbed by plants from soil.

12(e) Other adverse effects: None Known

Additional Information:

Hazard Category: Not Reported

Signal Word: No Signal Word

Hazard Symbol: No Symbol

Hazard Statement: No Statement

Section 13 - Disposal Considerations

Disposal: Dispose of in accordance with Local, State, Federal and International regulations. Observe safe handling precautions.

Container Cleaning and Disposal: Follow Local, State, Federal and International regulations. Observe safe handling precautions

Please note this information is for EA 6026LF Alloy in its original form. Any alterations can void this information.

Section 14 - Transport Information

14 (a-g) Transportation Information:

US Department of Transportation (DOT) under 49 CFR 172.101 does not regulate EA 6026LF Alloy as a hazardous material. All federal, state, and local laws and regulations that apply to the transport of this type of material must be adhered to.

Section 15 - Regulatory Information

Regulatory Information: *The following listing of regulations relating to an Ellwood Aluminum product may not be complete and should not be solely relied upon for all regulatory compliance responsibilities.* This product and/or its constituents are subject to the following regulations:

OSHA Regulations: Air Contaminant (29 CFR 1910.1000, Table Z-1, Z-2, Z-3): The product, EA 6026LF Alloy as a whole is not listed. However, individual components of the product are listed: Refer to Section 8, Exposure Controls and Personal Protection.

EPA Regulations: The product, EA 6026LF Alloy is not listed as a whole. However, individual components of the product are listed:

Components	Regulations
Aluminum	SARA 313, TSCA, SDWA
Magnesium	TSCA
Manganese	CERCLA, SARA 313, TSCA
Lead	CERCLA, CWA, SARA313, TSCA, SDWA

SARA 311/312 Potential Hazard Categories: Immediate Acute Health Hazard; Delayed Chronic Health Hazard

Section 15 - Regulatory Information (continued)

EPA Regulations (continued):

Section 313 Supplier Notification: The product, **EA 6026LF Alloy** contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-to-Know Act and 40 CFR part 372:

CAS #	Chemical Name	Percent by Weight
7429-90-5	Aluminum	92.95 - 97.9
7439-96-5	Manganese	0.2 - 1.0
7439-95-4	Magnesium	0.6 - 1.2
7439-92-1	Lead	0 - 0.4

Regulations Key:

- CAA Clean Air Act (42 USC Sec. 7412; 40 CFR Part 61 [As of: 8/18/06])
- CERCLA Comprehensive Environmental Response, Compensation and Liability Act (42 USC Secs. 9601(14), 9603(a); 40 CFR Sec. 302.4, Table 302.4, Table 302.4 and App. A)
- CWA Clean Water Act (33 USC Secs. 1311; 1314(b), (c), (e), (g); 136(b), (c); 137(b), (c) [as of 8/2/06])
- RCRA Resource Conservation Recovery Act (42 USC Sec. 6921; 40 CFR Part 261 App VIII)
- SARA Superfund Amendments and Reauthorization Act of 1986 Title III Section 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 U.S.C. s/s 2601 et seq. [1976])
- SDWA Safe Drinking Water Act (42 U.S.C. s/s 300f et seq. [1974])

State Regulations: The product, **EA 6026LF Alloy** as a whole is not listed in any state regulations. However, individual components of the product are listed in various state regulations:

Pennsylvania Right to Know: Contains regulated material in the following categories:

- Hazardous Substances: Aluminum & Aluminum (dust and fume), Magnesium, Manganese & Manganese Compounds, Silicon, Lead & lead Compounds
- Environmental Hazards: Aluminum & Aluminum (dust and fume), Manganese & Manganese Compounds, Lead & lead Compounds
- Special Hazardous Substance: Silicon

California Prop. 65:



The product, **EA 6026LF Alloy** can expose you to chemicals including lead (lead compounds) which is known to the State of California to cause cancer; and lead (lead compounds which is known to the State of California to cause reproductive toxicity. For more information go to www.P65Warnings.ca.gov.

New Jersey: Contains regulated material in the following categories:

- Hazardous Substance: Aluminum (dust and fume), Magnesium, Manganese & Manganese Compounds, Silicon, Lead & lead Compounds
- Environmental Hazard: Aluminum (dust and fume), Manganese & Manganese Compounds, Lead & lead Compounds
- Special Hazardous Substance: Aluminum (dust and fume), Manganese & Manganese Compounds, Silicon, Lead & lead Compounds

Minnesota: Manganese & Manganese Compounds, Lead & lead Compounds

Massachusetts: Aluminum (dust and fume), Magnesium, Manganese & Manganese Compounds, Silicon, Lead & lead Compounds

Other Regulations:

WHMIS Classification (Canadian): The product, **EA 6026LF Alloy** is not listed as a whole. However individual components are listed.

Ingredients	WHMIS Classification
Aluminum	Not Applicable
Magnesium	Flammable Solids – Category 2
Manganese	Reproductive toxicity - Category 2; Specific target organ toxicity - repeated exposure - Category 1; Combustible dusts*
Silicon	Flammable solids - Category 2 (The classification "Flammable solids" refers to the amorphous form of silicon powder); Combustible dusts**
Lead	Carcinogenicity - Category 2; Reproductive toxicity - Category 1 - Toxic to the reproductive function Toxic to the development; Specific target organ toxicity - repeated exposure - Category 1
Lead Dioxide	Oxidizing Solids - Category 3; Carcinogenicity - Category 1B; Specific target organ toxicity - repeated exposure - Category 1 Reproductive toxicity - Category 1 (Toxic to the reproductive function & Toxic to the development)
Lead Monoxide	Carcinogenicity - Category 1B; Specific target organ toxicity - repeated exposure - Category 1: Reproductive toxicity - Category 1 (Toxic to the reproductive function & Toxic to the development)

* This product could belong to the hazard class "Combustible dust", based on various factors related to the combustibility and explosiveness of its dust, including composition, shape and size of the particles

** This product belongs to the hazard class "Combustible dust" if 5% or more by weight of its composition has a particle size < 500 µm.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

Section 16 - Other Information

Prepared By: Ellwood Aluminum

Original Issue Date: 10/24/2023

Revised Date: Original

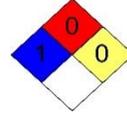
Section 16 - Other Information (continued)

Additional Information:

Hazardous Material Identification System (HMIS) Classification

Health Hazard	1
Fire Hazard	0
Physical Hazard	0

National Fire Protection Association (NFPA)



HEALTH= 1, Denotes possible chronic hazard if airborne dusts or fumes are generated Irritation or minor reversible injury possible.

FIRE= 0, Materials that will not burn.

PHYSICAL HAZARD= 0, Materials that are normally stable, even under fire conditions, and will not react with water, polymerize, decompose, condense, or self-react. Non-explosives.

HEALTH = 1, Exposure could cause irritation but only minor residual injury even if no treatment is given.

FLAMMABILITY = 0, Materials that will not burn.

INSTABILITY = 0, Normally stable, even under fire exposure conditions, and are not reactive with water.

ABBREVIATIONS/ACRONYMS:

ACGIH	American Conference of Governmental Industrial Hygienists	NIF	No Information Found
BEIs	Biological Exposure Indices	NIOSH	National Institute for Occupational Safety and Health
CAS	Chemical Abstracts Service	NTP	National Toxicology Program
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	ORC	Organization Resources Counselors
CLP	Classification, Labelling and Packaging	OSHA	Occupational Safety and Health Administration
CFR	Code of Federal Regulations	PEL	Permissible Exposure Limit
CNS	Central Nervous System	PNOR	Particulate Not Otherwise Regulated
GI, GIT	Gastro-Intestinal, Gastro-Intestinal Tract	PNOC	Particulate Not Otherwise Classified
HMIS	Hazardous Materials Identification System	PPE	Personal Protective Equipment
IARC	International Agency for Research on Cancer	ppm	parts per million
LC50	Median Lethal Concentration	RCRA	Resource Conservation and Recovery Act
LD50	Median Lethal Dose	REACH	Regulation on Registration, Evaluation, Authorization and Restriction of Chemicals
LD_{Lo}	Lowest Dose to have killed animals or humans	RTECS	Registry of Toxic Effects of Chemical Substances
LEL	Lower Explosive Limit	SARA	Superfund Amendment and Reauthorization Act
LOEL	Lowest Observed Effect Level	SCBA	Self-contained Breathing Apparatus
LOAEC	Lowest Observable Adverse Effect Concentration	SDS	Safety Data Sheet
µg/m³	microgram per cubic meter of air	STEL	Short-term Exposure Limit
mg/m³	milligram per cubic meter of air	TLV	Threshold Limit Value
mppcf	million particles per cubic foot	TWA	Time-weighted Average
MSHA	Mine Safety and Health Administration	UEL	Upper Explosive Limit
NFPA	National Fire Protection Association		

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.

EA 6026LF Alloy

Signal Word: **DANGER**

Symbols:



HAZARD STATEMENTS:

Causes damage to lungs through prolonged or repeated inhalation exposure.
May damage fertility or the unborn child

PRECAUTIONARY STATEMENTS

Do not breathe dusts or fumes.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
If exposed, concerned or feel unwell: Call a poison center or doctor/physician, get medical attention.
Dispose of contents in accordance with federal, state and local regulations.

SDS ID No.: EA 6026LF Alloy

ELLWOOD Aluminum
7158 Hubbard Masury Road
Hubbard, OH 44425

General Information: Phone: 330-534-8668

CHEMTREC (Day or Night): 1-800-424-9300

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