Flannery, Inc.

SAFETY DATA SHEETS (SDS)

1. Identification

Product:	Aluminum Extrusions, Reveals, Channels, Moldings, Screeds, Trims
Common Name:	Aluminum Alloy
Recommended use:	Aesthetic trims for Wall Systems
Manufacturer / Supplier:	Flannery, Incorporated 300 Parkside Drive San Fernando, CA 91340 818-837-7585; Fax 818-837-1155 www.flannerytrim.com
Emergency phone number:	818-837-7585

2. Hazard identification

Hazard Classification: Material is a stable solid

Eyes:	May irritate eyes when welding or plasma cutting. Irritation may occur if dust enters the eye.
Inhalation:	In case of discomfort, remove to a ventilated area. If discomfort persists, consult a physician.
Skin:	Remove particles by thoroughly washing with soap and water.
Ingestion:	Not likely. No known hazard.

Hazard Label: None required

Hazard statement: None required

3. Composition/information on ingredients

Ingredients		Percent		OSHA PEL	ACGIH TWA	Cas Number
Aluminum	Al	min.	93	5 mg/m³	5 mg/m³	7429-90-5
Beryllium	Be	max.	0.005	.002 mg/m³	.002 mg/m³	7440-41-7
Bismuth	Bi	max.	0.003	15 mg/m³	10 mg/m³	7440-69-6
Boron	B	max.	0.01	15 mg/m³	10 mg/m³	7440-42-8
Chromium	Cr	max.	0.35	1 mg/m³	0.5 mg/m³	7440-47-3
Copper	Cu	max.	1	1 mg/m³	0.2 mg/m³	7440-50-8
Gallium	Ga	max.	0.05			7440-55-3
Iron	Fe	max.	0.7	10 mg/m³	5 mg/m³	7439-89-6
Lead	Pb	max.	0.003	.05 mg/m³	.05 mg/m³	7439-92-1
Magnesium	MG	max.	1.5	15 mg/m³	10 mg/m³	7439-95-4
Manganese	MN	max.	0.85	5 mg/m³	0.2 mg/m³	7439-96-5
Nickel	NI	max.	0.02	1 mg/m³	1 mg/m³	7440-02-0
Silicon	Si	max.	1.4	15 mg/m³	10 mg/m³	7440-21-3
Tin	Sn	max.	0.01	2 mg/m³	2 mg/m³	7440-31-5
Titanium	Ti	max.	0.15	15 mg/m³	10 mg/m³	7440-32-6
Vanadium	V	max.	0.16	.05 mg/m³	.05 mg/m³	7440-62-2
Zinc	Zn	max.	0.25	5 mg/m³	5 mg/m³	7440-66-6

4. First aid measures

Eyes:	Flush eyes thoroughly with water, taking care to rinse under eyelids. If irritation persists, continue flushing for 15 minutes, rinsing from time to time under eyelids. If discomfort continues, consult a physician
Inhalation:	In case of discomfort, remove to a ventilated area. If discomfort persists, consult a physician.
Skin:	Remove particles by thoroughly washing with soap and water.
Ingestion:	Consult a physician immediately.

Acute symptoms

Eyes	Aluminum dust can irritate (mechanical abrasion) the eyes.
Inhalation	Aluminum and silicon dusts generated during use are considered nuisance particulates although inhalation of finely divided powder has been reported to cause pulmonary fibrosis.
Skin	Not a hazard under normal conditions. Skin contact with molten or hot metal can cause burns.
Ingestion	N/A

5. Fire-fighting measures

Extinguishing media:	This product is non-flammable in solid form. For fires involving aluminum fines or chips, use dry sand or a Class D dry-powder extinguisher. **DO NOT** use water or halogenated extinguishing agents.

6. Accidental release measures

Engineering Controls-	Local ventilation should be used to keep the exposure to fine particles and dusts below acceptable limits. Care should be taken to keep ducts and fans from collecting fine dust and particles that could cause a fire or explosion.
Personal Protective Equipment (PPE)-	Appropriate personal equipment is required when melting, casting, machining, welding, forging, or otherwise processing. The nature of the processing activity will determine what form of equipment is necessary; i.e. glasses, face shield, respirator, ear protection, and/or protective clothing.

7. Handling and storage

Handling-	Because of the risk of explosion, aluminum ingots and metal scrap should be thoroughly dried prior to remelting. Hot aluminum does not present any color change. Do not touch heated aluminum product, without knowing metal temperature. If metal is hot and touched, burns can result. Pre-heating is advised before the material is remelted.
Storage-	Aluminum should be stored where it is kept dry and free of materials that may cause a reaction when the material is remelted.

8. Exposure controls/personal protection

Ecological Information-

Aluminum and its alloys under solid form, such as ingots or manufactured items, do not present any hazard for the environment.

Waste Disposal Methods-

Used or unused product should be tested to determine hazard status and disposal requirements under federal, state, or local laws and regulations. Dispose of waste in accordance with federal, state, or local regulations.

Recycling- Aluminum in its solid form is recyclable. Aluminum in the form of particles may be reactive and its hazardous characteristics should be determined prior to disposal.

Engineering Controls: Local ventilation should be used to keep the exposure to fine particles and dusts below acceptable limits. Care should be taken to keep ducts and fans from collecting fine dust and particles that could cause a fire or explosion.

Personal Protective Equipment (PPE):

Appropriate personal equipment is required when melting, casting, machining, welding, forging, or otherwise processing. The nature of the processing activity will determine what form of equipment is necessary; i.e. glasses, face shield, respirator, ear protection, and/or protective clothing.

9. Physical and chemical properties

Appearance-	Silvery Metallic	Physical Form-	Solid
Vapor Pressure-	N/A	Evaporation Rate-	N/A
Vapor Density-	N/A	Density-	2.702
Boiling Temperature-	2057º C	Specific Gravity-	2.5-2.9
Melting Temperature-	359.7º C	Water Solubility-	NII
Solubility-	HCl, H2SO4 & Alkalies	pH-	N/A
Soluble in Water-	No	Odor-	None
Flash point	N/A	Flammability	N/A
Viscosity	Solid	Decomposition Temperature	N/A
Auto Ignition Temperature	N/A		

10. Stability and reactivity

Reactivity: Solid- stable at normal temperatures

Chemical stability: N/A material is Solid

Possibility of hazardous reaction: Solid- material will not combine to form a polymer

Conditions to avoid: Molten aluminum may explode on contact with water. In the form of particles, may explode when mixed with halogenated acids, halogenated solvents, bromates, iodates, or ammonium nitrate. Aluminum particles on contact with copper, lead, or iron oxides can react vigorously with release of heat if there is a source of ignition or intense heat.

Incompatible materials: Strong oxidizing materials, acids and bases

11. Toxicological information

Eyes	Aluminum dust can irritate (mechanical abrasion) the eyes.
Inhalation	Aluminum and silicon dusts generated during use are considered nuisance particulates although inhalation of finely divided powder has been reported to cause pulmonary fibrosis
Skin	Not a hazard under normal conditions. Skin contact with molten or hot metal can cause burns.
Ingestion	N/A

12. Ecological information

Ecotoxicity:	Aluminum and its alloys under solid form, such as ingots or manufactured items, do not present any hazard for the environment.
Persistence and degradability:	N/A
Bioaccumulative potential:	N/A
Mobility in the soil:	N/A

13. Disposal information

Waste Disposal Methods:	Used or unused product should be tested to determine hazard status and disposal requirements under federal, state, or local laws and regulations. Dispose of waste in accordance with federal, state, or local regulations.
Recycling:	Aluminum in its solid form is recyclable. Aluminum in the form of particles may be reactive and its hazardous characteristics should be determined prior to disposal

14. Transport information

Transport- Material solids must be strapped and protected from weather elements when transported. In solid form, this product is not classified as dangerous under the Transport Regulations, for road, sea, or air transport (no UN number).

15. Regulatory information

Transport- Aluminum powder must be packaged and shipped as a Flammable Solid. In solid form, this product is not classified as dangerous under the Transport Regulations, for road, sea, or air transport (no UN number).

WHMIS Classification (Canada)- D2 Material causing other toxic effects.
EEC Classification (Europe)-
- Warning Symbol: Not Applicable
- Warning Word: Not Applicable
- Risk Phrases: Not Applicable

Safety Phrases: Not Applicable

US Regulations: USA Regulations- This product may contain trace amounts of lead (Pb). Any process resulting in exposure to more than 0.5 mg/m³ of metal dust per day may result in a daily dose of lead of over 0.5 ug/day, the dose which the "California Safe Drinking and Toxic Enforcement Act" of 1986 requires notification. Refer to the appropriate regulation notification wording guidelines. The dose is not considered dangerous for health according to current toxicology studies.

Some alloys contain small amounts of Beryllium, Chromium, and/or Nickel (see Section 3). These metals are reportable on the EPA TSCA Inventory list.

16. Other information

For more information on the handling and storage of aluminum, consult the following documents published by Aluminum Association, 900 Nineteenth Street NW, Washington D.C., 2006:
"Guidelines for Handling Molten Aluminum"
"Recommendations for Storage and Handling of Aluminum Powders and Paste"
"Guidelines for Handling Aluminum Fines Generated During Various Aluminum Fabricating Operations"