### MATERIAL SAFETY DATA SHEET



### 1. Product and Company Identification

**Material Name** 

PAINTED ARCHITECTURAL ALUMINUM STORE FRONT SYSTEMS

**MSDS Number** 

1387

**Chemical Formula** 

Mixture

Product use

Various building materials, fabricated aluminum doors, windows, patio enclosures and curtain walls

Manufacturer information

Alcoa Inc.

201 Isabella Street

Pittlsburgh, PA 15201-5858 US Health and Safety: +1-412-553-4649

Kawneer Company, Inc. 555 Guthridge Court Norcross, GA 30092

**Emergency Information** 

USA: Chemtrec: +1-703-527-3887 +1-800-424-9300 ALCOA: +1-412-553-4001

Website

For a current MSDS, refer to Alcoa websites: www.alcoa.com or Internally at my.alcoa.com EHS

Community

### 2. Hazards Identification

**Emergency overview** 

Solid. Various colors. Odorless. Non-combustible as supplied. Small chips, fine turnings and dust from processing may be readily ignitable.

Explosion/fire hazards may be present when:

Dust or fines are dispersed in air.

· Chips, fines or dust are in contact with water.

Dust and fines are in contact with certain metal oxides (e.g., rust, copper oxide).

Molten metal in contact with water/moisture or certain metal oxides (e.g., rust, copper oxide).

Dust and fumes from processing Can cause irritation of the eyes, skin and upper respiratory tract. Combustion of the coatings can generate toxic and irritating gases.

### Potential health effects

The following statements summarize the health effects generally expected in cases of overexposures. User specific situations should be assessed by a qualified individual. Additional health information can be found in Section 11.

Eyes

Dust and fume from processing: Can cause irritation.

Skin

Dust or fume from processing: Can cause irritation.

Inhalation

Dust and fume from processing: Can cause irritation of the upper respiratory tract.

Health effects from mechanical processing (e.g., cutting, grinding): Chronic overexposures: Can

cause respiratory sensitization, asthma and lung cancer.

Combustion of the coatings can generate toxic and irritating gases. Acute overexposures: Can cause severe irritation of the respiratory tract and the accumulation of fluid in the lungs. Effects

can be delayed up to 24 hours.

Carcinogenicity and Reproductive Hazard Can present a cancer hazard (Strontium chromate).

Does not present any reproductive hazards.

Medical conditions

aggravated by exposure to product

Dust and fume from processing: Asthma, chronic lung disease, and skin rashes.

### 3. Composition / Information on Ingredients

**Composition comments** 

Complete composition is provided below and may include some components classified as

non-hazardous.

Components

CAS#

Percent

Aluminum

7429-90-5

85 - 95

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Magnesium	7439-95-4	<1.2	,
Coatings†	Not available	<2	(
Strontium chromate	7789-06-2	<0.03	

### **Additional Information**

† Coatings include: acrylic polymer and fluoropolymer resin.

Additional compounds which may be formed during processing are listed in Section 8.

### 4. First Aid Measures

### First aid procedures

Eye contact

Dust and fume from processing: Rinse eyes with plenty of water or saline for at least 15 minutes. Consult a physician.

Skin contact

Dust and fume from processing: Wash with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.

**Inhalation** 

Dust and fume from processing: Remove to fresh air. Check for clear airway, breathing, and presence of pulse. Provide cardiopulmonary resuscitation for persons without pulse or respirations. Consult a physician.

### 5. Fire Fighting Measures

### Flammable/Combustible Properties

Fire / Explosion Hazards

This product does not present fire or explosion hazards as shipped. Small chips, fine turnings, and dust from processing may be readily ignitable.

May be a potential hazard under the following conditions:

- Dust clouds may be explosive. Even a minor dust cloud can explode violently. Dust accumulation on the floor, ledges and beams can present a risk of ignition, flame propagation and secondary explosions.
- Chips, fines and dust in contact with water can generate flammable/explosive hydrogen gas. These gases could present an explosion hazard in confined or poorly ventilated spaces.
- Dust and fines in contact with certain metal oxides (e.g., rust, copper oxide). A thermite reaction with considerable heat generation, can be initiated by a weak ignition source.
- Molten metal in contact with water/moisture or certain metal oxides (e.g., rust, copper oxide). Moisture entrapped by molten metal can be explosive. Contact of molten aluminum with certain metal oxides can initiate a thermite reaction. Finely divided metals (e.g., powders or wire) may have enough surface oxide to produce thermite reactions/explosions.

Use Class D extinguishing agents on fines, dust or molten metal. Use coarse water spray on chips

### Extinguishing media

Suitable extinguishing media

and turnings.

DO NOT use halogenated extinguishing agents on small chips/fines.

Unsuitable extinguishing media

DO NOT use water in fighting fires around molten metal.

These fire extinguishing agents will react with the burning material.

### **Protection of firefighters**

Protective equipment for firefighters

Fire fighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and full protective clothing when appropriate.

### 6. Accidental Release Measures

Spill or leak procedure

Collect scrap for recycling.

If molten: Contain the flow using dry sand or salt flux as a dam. All tooling (e.g., shovels or hand tools) and containers which come in contact with molten metal must be preheated or specially coated and rust free. Allow the spill to cool before remelting as scrap.

### 7. Handling and Storage

Handling

Keep material dry. Avoid generating dust. Avoid contact with sharp edges or heated metal. Hot and cold aluminum are not visually different. Hot aluminum does not necessarily glow red.

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Requirements for Processes Which Generate Dusts or Fines If processing of this product generates dust or if extremely fine particulate is generated, obtain and follow the safety procedures and equipment guides contained in Aluminum Association Bulletin F-1 and National Fire Protection Association (NFPA) brochures listed in Section 16.

Use non-sparking handling equipment. Cover and reseal partially empty containers. Provide grounding and bonding where necessary to prevent accumulation of static charges during metal dust handling and transfer operations (See Section 15).

Local ventilation and vacuum systems must be designed to handle explosive dusts. Dry vacuums and electrostatic precipitators must not be used, unless specifically approved for use with flammable/explosive dusts. Dust collection systems must be dedicated to aluminum dust only and should be clearly labeled as such. Do not co-mingle fines of aluminum with fines of iron, iron oxide (rust) or other metal oxides.

Do not allow chips, fines or dust to contact water, particularly in enclosed areas.

Avoid all ignition sources. Good housekeeping practices must be maintained. Do not use compressed air to remove settled material from floors, beams or equipment.

### Requirements for Remelting of Scrap Material or Ingot

Molten metal and water can be an explosive combination. The risk is greatest when there is sufficient molten metal to entrap or seal off the water. Water and other forms of contamination on or contained in scrap or remelt ingot are known to have caused explosions in melting operations. While the products may have minimal surface roughness and internal voids, there remains the possibility of moisture contamination or entrapment. If confined, even a few drops of water can lead to violent explosions.

All tooling and containers which come in contact with molten metal must be preheated or specially coated and rust free. Molds and ladles must be preheated or oiled prior to casting. Any surfaces that may contact molten metal (i.e., concrete) should be specially coated.

Drops of molten metal in water (e.g. from plasma arc cutting), while not normally an explosion hazard, can generate enough flammable hydrogen gas to present an explosion hazard. Vigorous circulation of the water and removal of the particles minimize the hazards.

During melting operations, the following minimum guidelines should be observed:

- Inspect all materials prior to furnace charging and completely remove surface contamination such as water, ice, snow, deposits of grease and oil or other surface contamination resulting from weather exposure, shipment, or storage.
- Store materials in dry, heated areas with any cracks or cavities pointed downwards.
- Preheat and dry large items adequately before charging into a furnace containing molten metal. This is typically done by use of a drying oven or homogenizing furnace. The drying cycle should bring the metal temperature of the coldest item of the batch to 400°F (200°C) and then hold at that temperature for 6 hours.

Thermite explosions have been reported when aluminum alloys were melted in furnaces used for alloying with lead, bismuth or other metals with low melting temperatures. These metals, when added as high purity ingots, can seep through cracks in furnace liners and become oxidized. During subsequent melts in the furnace, molten aluminum can contact these metal oxides resulting in a thermite explosion.

### 8. Exposure Controls / Personal Protection

### **Engineering controls**

Dust and fume from processing: Use with adequate explosion-proof ventilation designed to handle particulates to meet the limits listed in Section 8, Exposure Guidelines.

### Exposure data

### **Compounds Formed During Processing**

### ACGIH - Threshold Limit Values - Skin Notations

Hydrogen fluoride (7664-39-3)

Skin - potential significant contribution to overall exposure by the cutaneous route

### Occupational exposure limits

### U.S. - OSHA

Components	Туре	Value	Form
Aluminum (7429-90-5)	TWA TWA (total dust)	5 mg/m3 15 mg/m3	(respirable fraction) (total dust)
Strontium chromate (7789-06-2)	TWA	5 μg/m3	(as Cr)

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Compounds Formed During Processing	Туре	Value	Form
Hydrogen fluoride (7664-39-3)	TWA	3 ppm	
Alcoa		<u>8</u>	
Components	Туре	Value	Form
Aluminum (7429-90-5)	TWA	5 mg/m3	(respirable fraction)
- 13		10 mg/m3	(8 Hour)
Strontium chromate (7789-06-2)	TWA	0.25 ug/m3	(as Cr)
Compounds Formed During Processing	Туре	Value	Form
Hydrogen fluoride (7664-39-3)	STEL	4.9 mg/m3	
	TWA	0.5 mg/m3	(8 Hour)
ACGIH		<b>u</b>	*
Components	Туре	Value	Form
Aluminum (7429-90-5)	TWA	1 mg/m3	(respirable fraction)
Strontium chromate (7789-06-2)	TWA	0.0005 mg/m3	(as Cr)
Compounds Formed During Processing	Туре	Value	Form
Hydrogen fluoride (7664-39-3)	Ceiling	2 ppm	(as F)
	TWA	0.5 ppm	(as F)

### Personal protective equipment

Eye / face protection

Wear safety glasses with side shields.

Skin protection

Wear appropriate gloves to avoid any skin injury.

Respiratory protection

Dust and fume from processing: Use NIOSH-approved respiratory protection as specified by an Industrial Hygienist or other qualified professional if concentrations exceed the limits listed in Section 8. Suggested respiratory protection: N95, Acid gas cartridges for Hydrogen fluoride.

### General

Personnel who handle and work with molten metal should utilize primary protective clothing like polycarbonate face shields, fire resistant tapper's jackets, neck shades (snoods), leggings, spats and similar equipment to prevent burn injuries. In addition to primary protection, secondary or day-to-day work clothing that is fire resistant and sheds metal splash is recommended for use with molten metal. Synthetic materials should never be worn even as secondary clothing (undergarments).

### 9. Physical & Chemical Properties

**Form** 

Solid.

**Appearance** 

Various colors

**Boiling point** 

Not applicable

Melting point

1025.6 - 1209.2 °F (552 - 654 °C)

Flash point

Not applicable

**Auto-ignition temperature** 

Flammability limits in air,

Not applicable

lower, % by volume

Not applicable

Flammability limits in air,

Not applicable

upper, % by volume Vapor pressure

Not appliicable

Vapor density

Not applicable

Solubility (water)

None

Density

2.69 - 2.7 g/cm3 (0.097 - 0.098 lb/in3)

pН

Not applicable

Odor

Odorless.

Partition coefficient

Not applicable

(n-octanol/water)

### 10. Chemical Stability & Reactivity Information

Chemical stability

Stable under normal conditions of use, storage, and transportation as shipped.

### Conditions to avoid

Chips, fines, dust and molten metal are considerably more reactive with the following:

• Water: Slowly generates flammable/explosive hydrogen gas and heat. Generation rate is greatly increased with smaller particles (e.g., fines and dusts). Molten metal can react violently/explosively with water or moisture, particularly when the water is entrapped.

Heat: Oxidizes at a rate dependent upon temperature and particle size.

• Strong oxidizers: Violent reaction with considerable heat generation. Can react explosively with nitrates (e.g., ammonium nitrate and fertilizers containing nitrate) when heated or molten.

 Acids and alkalis: Reacts to generate flammable/explosive hydrogen gas. Generation rate is greatly increased with smaller particles (e.g., fines and dusts).

 Halogenated compounds: Many halogenated hydrocarbons, including halogenated fire extinguishing agents, can react violently with finely divided or molten aluminum.

• Iron oxide (rust) and other metal oxides (e.g., copper and lead oxides): A violent thermite reaction generating considerable heat can occur. Reaction with aluminum fines and dusts requires only very weak ignition sources for initiation. Molten aluminum can react violently with iron oxide without external ignition source.

• Iron powder and water: Explosive reaction forming hydrogen gas when heated above 1470°F (800°C).

### 11. Toxicological Information

### Health effects associated with ingredients

Aluminum dust/fines and fumes: Low health risk by inhalation. Generally considered to be biologically inert (milling, cutting, grinding).

Strontium chromate [Chromium (VI) compounds]: Can cause irritation of eye, skin and respiratory tract. Skin contact: Can cause irritant dermatitis, allergic reactions and skin ulcers. Chronic overexposures: Can cause perforation of the nasal septum, respiratory sensitization, asthma, fluid in the lungs (pulmonary edema), lung damage, kidney damage, lung cancer, nasal cancer and cancer of the gastrointestinal tract. IARC/NTP: Listed as "known to be a human carcinogen" by the NTP. Listed as carcinogenic to humans by IARC (Group 1).

### Health effects associated with compounds formed during processing

Combustion of the coatings can generate Hydrogen fluoride.

Hydrogen fluoride: Can cause severe irritation of the eyes, mucous membranes, skin and respiratory tract. Acute overexposures: Can cause cough, shock, the accumulation of fluid in the lungs (pulmonary edema) and death. Effects can be delayed up to 24 hours.

Component analysis - LD50

No data available for this product.

### Components

### Toxicology Data - Selected LD50s and LC50s

Magnesium (7439-95-4) Strontium chromate (7789-06-2) Oral LD50 Rat: 230 mg/kg Oral LD50 Rat: 3118 mg/kg

### **Compounds Formed During Processing**

### Toxicology Data - Selected LD50s and LC50s

Hydrogen fluoride (7664-39-3)

Inhalation LC50 Rat: 850 mg/m3/1H; Inhalation LC50 Rat:1276 ppm/1H

### Carcinogenicity

No information available for product.

### Components

### ACGIH - Threshold Limit Values - Carcinogens

Aluminum (7429-90-5) Strontium chromate (7789-06-2) A4 - Not Classifiable as a Human Carcinogen

A2 - Suspected Human Carcinogen

### IARC - Group 1 (Carcinogenic to Humans)

Strontium chromate (7789-06-2)

Monograph 49 [1990] (listed under chromium[VI]), Supplement 7 [1987], Monograph 23 [1980], Monograph 2 [1973]

### NTP (National Toxicology Program) - Report on Carcinogens - Known Human Carcinogens

Strontium chromate (7789-06-2)

Known Human Carcinogen (listed under Chromium hexavalent compounds)

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### 12. Ecological Information

**General Product Information** 

Not available.

**Ecotoxicity** 

No ecotoxicity data was found for this product's components.

### Compounds Formed During Processing

**Ecotoxicity - Freshwater Fish Species Data** 

Hydrogen fluoride (7664-39-3)

48 Hr LC50 Lepomis macrochirus: 660 mg/L

**Ecotoxicity - Water Flea Data** 

Hydrogen fluoride (7664-39-3)

48 Hr EC50 Daphnia magna: 270 mg/L

**Environmental Fate** 

No data available for product.

### 13. Disposal Considerations

Disposal instructions

Reuse or recycle material whenever possible. If reuse or recycling is not possible, disposal must be

made according to local or governmental regulations.

Waste codes

RCRA Status: Not federally regulated in the U.S. if disposed of "as is."

RCRA waste codes other than described here may apply depending on use of the product. Status must be determined at the point of waste generation. Refer to 40 CFR 261 or state equivalent in the U.S. TCLP testing is recommended for Chromium.

### 14. Transport Information

### **General Shipping Information**

Basic shipping description:

**UN number** 

Proper shipping name

Not regulated

Hazard class

Packing group

### **General Shipping Notes** When "Not regulated", enter the proper freight classification, MSDS Number and Product Name onto the shipping paperwork.

### 15. Regulatory Information

US federal regulations

In reference to Title VI of the Clean Air Act of 1990, this material does not contain nor was it

manufactured using ozone-depleting chemicals.

All electrical equipment must be suitable for use in hazardous atmospheres involving aluminum powder in accordance with 29 CFR 1910.307. The National Electrical Code, NFPA 70, contains guidelines for determining the type and design of equipment and installation which will meet this

requirement.

### Components

### U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Strontium chromate (7789-06-2)

10 lb final RO; 4.54 kg final RO

U.S. - CERCLA/SARA - Section 313 - Emission Reporting

Aluminum (7429-90-5)

1.0 % de minimis concentration (dust or fume only)

### Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard - Yes, If particulates/fumes generated during processing Delayed Hazard - Yes, If particulates/fumes generated during processing

Fire Hazard - No Pressure Hazard - No

Reactivity Hazard - No, If molten

### State regulations

### Components

### U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances

Aluminum (7429-90-5)

Present Present

Magnesium (7439-95-4)

Strontium chromate (7789-06-2)

Present (listed under Chromium compounds)

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ALCOA MSDS US

### State regulations

### Components

U.S. - Massachusetts - Right To Know List

Aluminum (7429-90-5)

Present

Magnesium (7439-95-4)

Present

Strontium chromate (7789-06-2)

Carcinogen; Extraordinarily hazardous

U.S. - Minnesota - Hazardous Substance List

Aluminum (7429-90-5)

Present (dust)

Strontium chromate (7789-06-2)

Carcinogen

U.S. - New Jersey - Right to Know Hazardous Substance List

Aluminum (7429-90-5)

sn 0054

Magnesium (7439-95-4)

sn 1136

Strontium chromate (7789-06-2)

sn 1742

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

Strontium chromate (7789-06-2)

Present

U.S. - Pennsylvania - RTK (Right to Know) List

Aluminum (7429-90-5)

Environmental hazard

Magnesium (7439-95-4)

Present

Strontium chromate (7789-06-2)

Environmental hazard; Special hazardous substance

### **Inventory status**

Country(s) or region	Inventory name	On inventory (yes,	/no)*
Australia	Australian Inventory of Chemical Substances (AICS)		Yes
Canada	Domestic Substances List (DSL)		Yes
Canada	Non-Domestic Substances List (NDSL)		No
China	Inventory of Existing Chemical Substances in China (IECSC)		No
STORAGE STORAG	European Inventory of New and Existing Chemicals (EINECS)		Yes
Europe	European List of Notified Chemical Substances (ELINCS)		No
Europe	Inventory of Existing and New Chemical Substances (ENCS)		No
Japan			No
Korea	Existing Chemicals List (ECL)		No
New Zealand	New Zealand Inventory		No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)		2000
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory		Yes

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**Inventory information** 

Japan - ENCS Inventory: Pure metals are not specifically listed by CAS or ENCS number. The class

of compounds for each of these metals is listed on the ENCS inventory.

### 16. Other Information

**MSDS History** 

Origination date: April 21, 2006 Supersedes: April 21, 2006 Revision date: June 19, 2009

**MSDS Status** 

June 19, 2009: New format. April 21, 2006: New MSDS.

Prepared By

Hazardous Materials Control Committee

Preparer: Jon N. Peace, 412-553-2293/Robert W. Barr, 412-553-2618

**MSDS System Number** 

174867

Material name: PAINTED ARCHITECTURAL ALUMINUM STORE FRONT SYSTEMS 1387 Version #: 02 Revision date: 06-19-2009 Print date: 06-19-2009

### Other information

- Guide to Occupational Exposure Values 2009, Compiled by the American Conference of Governmental Industrial Hygienists (ACGIH).
- Documentation of the Threshold Limit Values and Biological Exposure Indices, Sixth Edition, 1991, Compiled by the American Conference of Governmental Industrial Hygienists, Inc. (ACGIH).
- NIOSH Pocket Guide to Chemical Hazards, U.S. Department of Health and Human Services, February 2004.
- Dangerous Properties of Industrial Materials, Sax, N. Irving, Van Nostrand Reinhold Co., Inc., 1984.
- Patty's Industrial Hygiene and Toxicology: Volume II: Toxicology, 4th ed., 1994, Patty, F. A.; edited by Clayton, G. D. and Clayton, F. E.: New York: John Wiley & Sons, Inc.
- expub, Expert Publishing, LLC., www.expub.com
- Aluminum Association's Bulletin F-1, "Guidelines for Handling Aluminum Fines Generated During Various Aluminum Fabricating Operations." The Aluminum Association, 1525 Wilson Boulevard, Suite 600, Arlington, Virginia 22209, www.aluminum.org.
- Aluminum Association, "Guidelines for Handling Molten Aluminum, The Aluminum Association, 1525 Wilson Boulevard, Suite 600, Arlington, Virginia 22209, www.aluminum.org.
- NFPA 65, Standard for Processing and Finishing of Aluminum (NFPA phone: 800-344-3555)
- NFPA 651, Standard for Manufacture of Aluminum and Magnesium Powder
- NFPA 70, Standard for National Electrical Code (Electrical Equipment, Grounding and Bonding)
- NFPA 77, Standard for Static Electricity

### Key/Legend:

ACGIH American Conference of Governmental Industrial Hygienists

AICS Australian Inventory of Chemical Substances

CAS Chemical Abstract Services

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

CFR Code of Federal Regulations
CPR Cardio-pulmonary Resuscitation
DOT Department of Transportation
DSL Domestic Substances List (Canada)

EC Effective Concentration

ED Effective Dose

EINECS European Inventory of Existing Commercial Chemical Substances

ENCS Japan - Existing and New Chemical Substances

EWC European Waste Catalogue
EPA Environmental Protective Agency

IARC International Agency for Research on Cancer

LC Lethal Concentration

LD Lethal Dose

MAK Maximum Workplace Concentration (Germany) "maximale Arbeitsplatz-Konzentration"

NDSL Non-Domestic Substances List (Canada)

NIOSH National Institute for Occupational Safety and Health

NTP National Toxicology Program
OEL Occupational Exposure Limit

OSHA Occupational Safety and Health Administration

PIN Product Identification Number PMCC Pensky Marten Closed Cup

RCRA Resource Conservation and Recovery Act

SARA Superfund Amendments and Reauthorization Act

SIMDUT Système d'Information sur les Matières Dangereuses Utilisées au Travail

STEL Short Term Exposure Limit

TCLP Toxic Chemicals Leachate Program
TDG Transportation of Dangerous Goods

TLV Threshold Limit Value
TSCA Toxic Substances Control Act
TWA Time Weighted Average

WHMIS Workplace Hazardous Materials Information System

m meter, cm centimeter, mm millimeter, in inch, g gram, kg kilogram, lb pound, μg microgram, ppm parts per million, ft feet

\*\*\* End of MSDS \*\*\*

### Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.

# PAINTED ARCHITECTURAL ALUINAUM STORE FRONT SYSTEMS

### WARNING

Non-combustible as supplied. Small chips, fine turnings and dust from processing may be readily ignitable.

## Explosion/fire hazards may be present when:

Dust or fines are dispersed in air; Chips, fines or dust are in contact with water; Dust and fines are in contact with certain metal oxides (e.g., rust, copper oxide). Molten metal in contact with water/moisture or certain metal oxides (e.g., rust, copper oxide). Dust and fumes from processing Can cause irritation of the eyes, skin and upper respiratory tract. Combustion of the coatings can generate toxic and irritating gases.

FIRST AID		FIRE FIGHTING
Eye contact	Dust and fume from processing: Rinse eyes with plenty of water or saline for at least 15 minutes. Consult a physician.	Suitable extinguishing me
Skin contact	Dust and fume from processing: Wash with soap and water for at least 15 minutes. Get medical attention if irritation develops or persists.	Extinguishing me
Inhalation	Dust and fume from processing: Remove to fresh air. Check for clear airway, breathing and presence of pulse. Provide cardiopulmonary resuscitation for	used for safety
	persons without pulse or respirations. Consult a physician.	SPILL PROCEDU

or at	Suitable extinguishing media	Suitable Use Class D extinguishing agents on fines, dust or molten metal. Use coarse extinguishing media water spray on chips and turnings.
ay, or	Extinguishing media which must not be used for safety reasons	Extinguishing media DO NOT use halogenated extinguishing agents on small chips/fines.  which must not be DO NOT use water in fighting fires around molten metal.  used for safety These fire extinguishing agents will react with the burning material.  reasons
	SPILL PROCEDURES	
	Spill or leak procedure	Collect scrap for recycling. If molten: Contain the flow using dry sand or salt flux as a dam. All tooling (e.g., shovels or hand tools) and containers which come in contact with molten metal must be preheated or specially coated and rust free. Allow the spill to cool before remelting as scrap.
	HANDLING AND STORAGE	RAGE

Keep material dry. Avoid generating dust. Avoid contact with sharp edges or heated metal. Hot and cold aluminum are not visually different. Hot aluminum does not necessarily glow red.		7429-90-5	7439-95-4
Keep material dry. Avoid gener heated metal. Hot and cold alu does not necessarily glow red.			
Handling	Contains:	Aluminum	Magnesium

See Alcoa Material Safety Data Sheet No. 1387 for more information about use and disposal. Emergency Phone: (412) 553-4001.

Not available 7789-06-2

Strontium chromate

Coatings†

