

Product Name: CONSUMER/FOODSERVICE USE ALUMINUM FOIL

ID: 1111

* * * Section 1 - Chemical Product and Company Identification * * *

Chemical Formula: Aluminum (Al) foil with alloying elements

Other Designations: Reynolds Wrap(R), 8111 Aluminum Foil, 8011 Aluminum Foil, 1200 Aluminum Foil, 1100

Aluminum Foil. Foodservice Aluminum Foil

Alcoa Inc. Phone: Health and Safety: 1-412-553-4649

201 Isabella Street

Pittsburgh, PA 15212-5858

Emergency Information:

Website:

For the most up-to-date MSDS, refer to the Alcoa website: www.alcoa.com

* * * Section 2 - Composition / Information on Ingredients * * *

| CAS# | Component | Percent |
|-----------|-----------|---------|
| 7429-90-5 | Aluminum | >96.9 |
| 7440-21-3 | Silicon | 0-1.1 |
| 7439-89-6 | Iron | 0-1 |

* * * Section 3 - Hazards Identification * * *

Emergency Overview

Solid. Silvery. Odorless. Non-combustible as supplied. Not hazardous under recommended conditions of use.

Potential Health Effects

This product is considered an article and does not pose any health hazard under normal conditions of use.

Eyes

Not a route of exposure under normal usage. May cause mechanical irritation if material comes into contact with the eye.

Skin: Not a route of exposure under normal usage.

Ingestion: Not a route of exposure under normal usage. **Inhalation:** Not a route of exposure under normal usage.

Health Effects of Ingredients

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

* * * Section 4 - First Aid Measures * * *

First Aid: Eyes

None needed under normal usage. If material comes into contact with the eye, flush eyes with water while holding eyelids apart to ensure complete irrigation.

First Aid: Skin None needed under normal usage.

First Aid: Inhalation None needed under normal usage.

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* * * Section 5 - Fire Fighting Measures * * *

Flammable/Combustible Properties

This product does not present fire or explosion hazards as shipped.

Extinguishing Media

Use Class D extinguishing agents on dusts, fines or molten metal.

Fire Fighting Equipment/Instructions

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

* * * Section 6 - Accidental Release Measures * * *

Small/Large Spill: Collect scrap for recycling.

* * * Section 7 - Handling and Storage * * *

Handling/Storage: Product should be kept dry.

* * * Section 8 - Exposure Controls / Personal Protection * * *

Engineering Controls: Not required under recommended conditions of use.

Personal Protective Equipment

Respiratory Protection: Not required under recommended conditions of use.

Eye Protection: Not required under recommended conditions of use. **Skin Protection:** Not required under recommended conditions of use.

Exposure Guidelines

A: General Product Information: No information available for product.

B: Component Exposure Limits

Aluminum (7429-90-5)

ACGIH 10 mg/m3 TWA (metal dust)

OSHA 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

Silicon (7440-21-3)

ACGIH 10 mg/m3 TWA

OSHA 15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)

* * * Section 9 - Physical & Chemical Properties * * *

Physical State: Solid. Appearance: Silvery

Boiling Point: Not determined **Melting Point:** 1108-1207°F (598-653°C) **Vapor Pressure:** Not applicable **Vapor Density:** Not applicable

Solubility in Water: None Specific Gravity: See Density

Density: 0.094-0.11 lb/in3 (2.6-3.1 **pH Level:** Not applicable

g/cm3)

Odor: None Odor Threshold: Not applicable

Octanol-Water Coefficient: Not applicable

* * * Section 10 - Chemical Stability & Reactivity Information * * *

Stability

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

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* * * Section 11 - Toxicological Information * * *

Health Effects of Ingredients

A: General Product Information

No information available for product.

B: Component Analysis - LD50/LC50

Silicon (7440-21-3)

Oral LD50 Rat: 3160 mg/kg

Iron (7439-89-6) Oral LD50 Rat: 30 g/kg

Carcinogenicity

A: General Product Information

No information available for product.

B: Component Carcinogenicity

None of this product's components are listed by ACGIH, IARC, or NTP.

* * * Section 12 - Ecological Information * * *

Ecotoxicity

A: General Product Information

No information available for product.

B: Component Analysis - Ecotoxicity - Aquatic Toxicity

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

Environmental Fate

No information available for product.

* * * Section 13 - Disposal Considerations * * *

Disposal Instructions: Reuse or recycle material whenever possible. Material may be disposed of at a sanitary landfill. **US EPA Waste Number & Descriptions**

A: General Product Information

RCRA Status: Not federally regulated in the U.S. if disposed of "as is." Otherwise, characterize in accordance with applicable regulations (40 CFR 261 or state equivalent in the U.S.)

B: Component Waste Numbers

RCRA waste codes other than described under Section A may apply depending on use of product. Refer to 40 CFR 261 or state equivalent in the U.S.

* * * Section 14 - Transportation Information * * *

Special Transportation

| | PSN #1 | PSN #2 | PSN #3 | PSN #4 |
|---------------------------|---------------|--------|--------|--------|
| Notes: | (1) | | | |
| Proper Shipping Name: | Not regulated | | | |
| Hazard Class: | - | | | |
| UN NA Number: | - | | | |
| Packing Group: | - | | | |
| RQ: | - | | | |
| Other - Tech Name: | - | | | |
| Other - Marine Pollutant: | - | | | |

Notes:

(1) When "Not regulated," enter the proper freight classification, "MSDS Number," and "Product Name" on the shipping paperwork.

| Canadian TDG Hazard Class & PIN: | Not regulated |
|----------------------------------|---------------|
| | |

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* * * Section 15 - Regulatory Information * * *

US Federal Regulations

A: General Product Information

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.

B: Component Analysis

This material contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 313 (40 CFR 372.65) and/or CERCLA (40 CFR 302.4).

Aluminum (7429-90-5)

SARA 313: 1.0 % de minimis concentration (fume or dust only)

SARA 311/312 Physical and Health Hazard Categories:

Immediate (acute) Health Hazard: Yes, if particulates/fumes generated during processing. **Delayed (chronic) Health Hazard:** Yes, if particulates/fumes generated during processing.

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Fire Hazard: No Sudden Release of Pressure: No

Reactive: Yes, if molten

State Regulations

A: General Product Information: No information available for product.

B: Component Analysis - State

The following components appear on one or more of the following state hazardous substances lists:

| Component | CAS# | CA | FL | MA | MN | NJ | PA |
|-----------|-----------|-----|----|-----|-----|-----|-----|
| Aluminum | 7429-90-5 | Yes | No | Yes | Yes | Yes | Yes |
| Silicon | 7440-21-3 | No | No | Yes | Yes | Yes | Yes |
| Iron | 7439-89-6 | Yes | No | No | No | No | No |

Other Regulations

A: General Product Information: No information available for product.

B: Component Analysis - WHMIS IDL

The following components are identified under the Canadian Hazardous Products Act Ingredient Disclosure List:

| Component | CAS# | Minimum Concentration |
|-----------|-----------|----------------------------------------|
| Aluminum | 7429-90-5 | 1 % (English Item 47, French Item 197) |

C: Component Analysis - Inventory

| Component | CAS# | TSCA | DSL | EINECS | AUST. | MITI |
|-----------|-----------|------|-----|--------|-------|------|
| Aluminum | 7429-90-5 | Yes | Yes | Yes | Yes | No |
| Silicon | 7440-21-3 | Yes | Yes | Yes | Yes | No |
| Iron | 7439-89-6 | Yes | Yes | Yes | Yes | No |

Note: Pure metals are not specifically listed by CAS or MITI number. The class of compounds for each of these metals is listed on the MITI inventory.

* * * Section 16 - Other Information * * *

MSDS History

Original: October 19, 2001 Revised: November 11, 2004

MSDS Status

11/11/04: Reviewed on a periodic basis in accordance with Alcoa policy. Changes in Sections 1 and 15.

10/19/01: New MSDS. Replaces Reynolds MSDS No. 5232. For consumer and foodservice use of aluminum foil

only. Use MSDS 980 for industrial/manufacturing uses of aluminum foil.

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Prepared By

Hazardous Materials Control Committee Preparer: Jon N. Peace, 412-553-2293

MSDS System Number

156285

Other Information

- * Aluminum Association's Bulletin F-1, "Guidelines for Handling Aluminum Fines Generated During Various Aluminum Fabricating Operations." The Aluminum Association, 900 19th Street, N.W., Washington, DC 20006.
- * Aluminum Association, "Guidelines for Handling Molten Aluminum, The Aluminum Association, 900 19th Street, N.W., Washington, DC 20006.
- * 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
- * <u>Guide to Occupational Exposure Values-2004</u>, Compiled by the American Conference of Governmental Industrial Hygienists (ACGIH).
- * <u>Documentation of the Threshold Limit Values and Biological Exposure Indices</u>, 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, June 1994.
- * 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.

Key-Legend:

ACGIH American Conference of Governmental Industrial Hygienists

AICS Australian Inventory of Chemical Substances

CAS Chemical Abstract Service

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

EPA Environmental Protection Act

 $\begin{array}{ll} \text{IARC} & \text{International Agency for Research on Cancer} \\ \text{LC}_{50} & \text{Lethal concentration (50 percent kill)} \\ \text{LC}_{\text{Lo}} & \text{Lowest published lethal concentration} \\ \text{LD}_{50} & \text{Lethal dose (50 percent kill)} \\ \end{array}$

LD_{Lo}

Lowest published lethal dose

LFL

Lower Flammable Limit

MITI Ministry of International Trade & Industry NFPA National Fire Protection Association

NIOSH National Institute for Occupational Safety and Health

NTP National Toxicology Program
OEL Occupational Exposure Limit

OSHA Occupational Safety and Health Administration

PEL Permissible Exposure Limit
PIN Product Identification Number
PSN Proper Shipping Name

RCRA Resource Conservation and Recovery Act
SARA Superfund Amendments and Reauthorization Act

STEL Short Term Exposure Limit
TCLP Toxic Chemicals Leachate Program
TDG Transportation of Dangerous Goods

TLV Threshold Limit Value
TSCA Toxic Substance Control Act
TWA Time Weighted Average
UFL Upper Flammable Limit

WHMIS Workplace Hazardous Materials Information System

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^{*} Integrated Index(R), MICROMEDEX, Inc., 2004

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atmosphere centimeter cm g, gm gram inch in kilogram kg pound lb meter m milligram mg ml, ML milliliter millimeter mm

million particles per cubic foot mppcf not otherwise specified parts per billion n.o.s.

ppb ppm

parts per million pounds per square inch absolute psia

micron u ug microgram

INFORMATION HEREIN IS GIVEN IN GOOD FAITH AS AUTHORITATIVE AND VALID; HOWEVER, NO WARRANTY, EXPRESS OR IMPLIED, CAN BE MADE.

This is the end of MSDS # 1111

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