

MATERIAL SAFETY DATA SHEET

1. Chemical Product and Company Identification

1.1 Product Name : Aluminum Wire

Chemical Name: Aluminum

Chemical Family: Metals

Use: Bonding Wire: used in the manufacturing of microelectronic devices as an Electrical Interconnect, either between a chip and substrate or between two chips.

1.2 Company Identification: SPM (M) Sdn. Bhd.
48, Hilir Sungai Keluang 2, Phase 4
Bayan Lepas Industrial Zone, 11900 Penang, Malaysia
Tel: (60)4-6433062 Fax: (60)4-6465667

1.3 Contact Point : Mr. Lawrence Moterulo
Engineering Manager
SPM Co. Inc., 1 Labriola Court
Armonk, NY 10504-1336, USA
Tel: (914)273 5500 Fax: (914)273 2065
E-mail: lmonterulo@sempck.com

2. Composition/Information on Ingredients

Aluminum – Principal Element
CAS Number : 7429-90-5

3. Hazard Identification

Not expected to be a health hazard

4. First Aid

Not expected to require first aid measures. However, if large amounts of aluminum are ingested, contact a physician.

5. Fire and Explosion Data

Do not present fire or explosion under normal conditions.
Use fire fighting methods and materials that are appropriate for surrounding fire. Use water spray, extinguishing agents and dry sands.. Do not use halogenated extinguishing agent.

6. Accidental Release Measures

Collect scrap for re-cycling/disposal in accordance with all applicable Federal, state and local regulations.

7. Handling and Storage

Store in a dry low fire risk area.
Wear impervious gloves to prevent prolonged or repeated skin contact.

8. Exposure Limits and Personal Protection

- OSHA PELs

Al – Dust & Fume – 10mg/m³

- NIOSH REL, 1987
None established

- Toxicity Data – None reported

Wear impervious gloves to prevent prolonged or repeated skin contact.

9. Physical and Chemical Properties

- 9.1 Appearance : Silvery White metallic solid
- 9.2 Odour: No odour
- 9.3 Boiling Point: 4221deg.F/2327deg. C
- 9.4 Melting Point: 1220deb.F/660deg. C
- 9.5 Vapour Pressure: 1mm of Hg at 2343deb.F/1284deg. C
- 9.6 Density: 2.7
- 9.7 Solubility in Water: Insoluble in hot and cold water
- 9.8 Flash Point: None Reported
- 9.9 Auto-ignition Temperature: 1202deg.F/650deg.C (cloud)
1140deg.F/760deg.C (dust layer)

10. Stability and Reactivity Data

Stable at normal conditions of use, storage and transportation.
With water: Generates hydrogen and heat slowly.
Hazardous polymerization cannot occur.

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11. Toxicological Information

Low health risk potential.

12. Ecological Information

Environmental Fate: No information found
Environmental Toxicity: No information found.

13. Disposal Information

Collect scrap for re-cycling. Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Dispose of container and unused contents in accordance with federal, state and local requirements.

14. Transport Information

Not regulated

15. Regulatory Information

Australia Hazchem Code: None Allocated
Poison Schedule: None allocated

16. Other Information

Reference:# MSDS-13-AL
Date: 29 September 2005
Revision: 2
Department: Quality

MSDS Collection References:

1. MSDS-Aluminum Company of America - No.C384
2. MSDS-Genium Publishing Corporation – Sheet No. 100
3. MSDS-Mallinckrodt Baker, Inc. – MSDS Number: A2705