



SAFETY DATA SHEET

Issuing Date 13-Jul-2012

Revision Date 20-Jan-2025

Revision Number 10

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product identifier

Product Name Aluminum Wire

Other means of identification

Product Code(s) ALUMINUM WIRE

Synonyms Magnet Wire

Recommended use of the chemical and restrictions on use

Recommended Use Electrical Conductor.

Uses advised against No information available

Details of the supplier of the safety data sheet

Supplier Address

Essex Solutions USA LLC.
1601 Wall Street
Fort Wayne, Indiana 46802
Telephone 260.461.4000

Emergency telephone number

Emergency Telephone Chemtrec: 1-800-424-9300 for US/ 001 703-527-3887 outside US

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Varies

Physical state solid

Odor None

Hazards not otherwise classified (HNOC)

Not Applicable

Other Information

Not applicable

Unknown acute toxicity 100 % of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not Applicable

Mixture

Synonyms Magnet Wire.

| Chemical name | CAS No | Weight-% | Trade secret |
|---------------|-----------|-----------|--------------|
| Aluminum | 7429-90-5 | 90 - 100% | * |

4. FIRST AID MEASURES

Description of first aid measures

| | |
|-----------------------|--|
| General advice | This product is an article as sold. When the material is soldered, welded or hot staked it may release vapors or fumes from the degradation of the coating. All first aid measures assume welding or hot staking has occurred. |
| Eye contact | Exposure to fumes, vapors or smoke from thermally degraded product can cause irritation to eyes. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician. |
| Skin contact | Wash off immediately with plenty of water for at least 15 minutes. Consult a physician if necessary. |
| Inhalation | Remove to fresh air. If not breathing, give artificial respiration. Consult a physician. |
| Ingestion | Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Consult a physician. |

Most important symptoms and effects, both acute and delayed**Symptoms****Indication of any immediate medical attention and special treatment needed**

| | |
|---------------------------|------------------------|
| Note to physicians | Treat symptomatically. |
|---------------------------|------------------------|

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use water spray, fog, Carbon dioxide (CO₂), foam or dry chemical.

Unsuitable extinguishing media Decomposition by contact with water may generate vapors which can be ignited by heat or open flame.

Specific hazards arising from the chemical

No information available.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal precautions Ensure adequate ventilation.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials Incompatible with strong acids and bases. Acetylene gas and magnesium.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Control parameters****Exposure Limits**

| Chemical name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|-----------------------|--|--|---|
| Aluminum 7429-90-5 | TWA: 1 mg/m ³ respirable particulate matter | TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15 mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 5 mg/m ³ Al Aluminum | TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust TWA: 5 mg/m ³ Al |

Appropriate engineering controls

Engineering controls Ventilation systems.

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------|---|
| Eye/face protection | Tightly fitting safety goggles Avoid contact with eyes |
| Skin and body protection | No special protective equipment required. |
| Respiratory protection | No protective equipment is needed under normal use conditions. Exposure to fumes, vapors or smoke from thermally degraded product can cause respiratory system irritation. Some of these component chemicals include low concentrations of phenol, cresols, and xylene, as well as burnt resinous material. At extremely high temperatures toluene di-isocyanate (TDI) may be emitted from certain coated wire. TDI is considered a sensitizer and may be a carcinogen. Use only with adequate ventilation. |

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|-----------------------|--------------------------|-----------------------|--------------------------|
| Physical state | solid | Odor | None |
| Appearance | Varies | Odor threshold | No information available |
| Color | No information available | | |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---------------------------------------|------------------------------------|--------------------------|
| pH | No information available | No information available |
| Melting point / freezing point | 660 °C / 1220 °F | |
| Boiling point / boiling range | 2327 °C / 4478 °F | |
| Flash point | No information available | (based on .?) |
| Evaporation rate | No information available | |
| Flammability (solid, gas) | No information available | |
| Flammability Limit in Air | | |
| Upper flammability limit: | No information available | |
| Lower flammability limit: | No information available | |
| Vapor pressure | No information available | |
| Vapor density | 5 | |
| Relative density | No information available | |
| Water solubility | Practically insoluble (~0.4 ug/mL) | |
| Solubility in other solvents | No information available | |
| Partition coefficient | No information available | |
| Autoignition temperature | No information available | |
| Decomposition temperature | No information available | |
| Kinematic viscosity | No information available | |
| Dynamic viscosity | No information available | |
| Explosive properties | No information available | |
| Oxidizing properties | No information available | |

Other Information

| | |
|-------------------------|--------------------------|
| Softening point | No information available |
| Molecular weight | |
| VOC Content (%) | No information available |
| Liquid Density | 2.70 g/cm |
| Bulk density | No information available |

10. STABILITY AND REACTIVITY

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Conditions to avoid

Extremes of temperature and direct sunlight.

Incompatible materials

Incompatible with strong acids and bases. Acetylene gas and magnesium.

Hazardous decomposition products

Carbon dioxide (CO₂). Thermal decomposition can lead to release of irritating gases and vapors.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Harmful by inhalation At extremely high temperatures toluene di-isocyanate (TDI) may be emitted from certain polyurethane coated wire. TDI is considered a sensitizer and may be a carcinogen.

Inhalation

There is no data available for this product.

Eye contact

There is no data available for this product.

Skin contact

There is no data available for this product.

Ingestion

There is no data available for this product.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms

No information available.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Reproductive toxicity

No information available.

Specific target organ toxicity (single exposure)

No information available.

STOT - repeated exposure

No information available.

Chronic toxicity

Prolonged exposure to fumes from welding or hot staking may cause chronic effects.

Target organ effects

Eyes, Lungs.

Aspiration hazard

No information available.

Numerical measures of toxicity - Product Information

12. ECOLOGICAL INFORMATION

Ecotoxicity

5 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes

Dispose of in accordance with local regulations. Recyclable material. Please send to local recycling center.

Contaminated packaging

Do not reuse container.

14. TRANSPORT INFORMATION

DOT**IATA** Not regulated**IMDG** Not regulated

15. REGULATORY INFORMATION

International Inventories

| | |
|----------------------|----------|
| TSCA | Complies |
| DSL/NDL | Complies |
| EINECS/ELINCS | Complies |
| ENCS | Complies |
| IECSC | Complies |
| KECL | Complies |
| PICCS | Complies |
| AICS | Complies |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 Canadian Inventory Legend

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

| Chemical name | CAS No | Weight-% | SARA 313 - Threshold Values % |
|---------------|-----------|----------|-------------------------------|
| Aluminum | 7429-90-5 | >90 | 1.0 |

SARA 311/312 Hazard Categories

| | |
|--|----|
| Acute health hazard | No |
| Chronic Health Hazard | No |
| Fire hazard | No |
| Sudden release of pressure hazard | No |
| Reactive Hazard | No |

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

US State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|---------------|------------|---------------|--------------|
| Aluminum | X | X | X |

| | | | |
|-----------|--|--|--|
| 7429-90-5 | | | |
|-----------|--|--|--|

U.S. EPA Label Information

EPA Pesticide Registration Number Not Applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

| | | | | |
|-------------|------------------|----------------|--------------------|------------------------------------|
| <u>NFPA</u> | Health hazards 1 | Flammability 0 | Instability 0 | Physical and chemical properties - |
| <u>HMIS</u> | Health hazards 1 | Flammability 0 | Physical hazards 0 | Personal precautions X |

Prepared By Robert Distler
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Revision Note
 Updated Logo
 SDS section(s) updated 15 - Verified most current CA Prop 65 information

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet