

**SAFETY DATA SHEET**

Creation Date 24-Jun-2009

Revision Date 19-Jan-2018

Revision Number 3

**1. Identification**

**Product Name** Aluminium-nickel, Raney-type alloy, powder

**Cat No. :** AC206230000; AC206230025; AC206230050; AC206231000; AC206235000

**CAS-No** 12635-29-9  
**Synonyms** Raney-type alloy for the preparation of Raney Nickel catalyst.

**Recommended Use** Laboratory chemicals.  
**Uses advised against** Not for food, drug, pesticide or biocidal product use

**Details of the supplier of the safety data sheet****Company**

Fisher Scientific  
One Reagent Lane  
Fair Lawn, NJ 07410  
Tel: (201) 796-7100

Acros Organics  
One Reagent Lane  
Fair Lawn, NJ 07410

**Emergency Telephone Number**For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99**CHEMTREC** Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887**2. Hazard(s) identification****Classification**

Classification under 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                                                                        |            |
|------------------------------------------------------------------------|------------|
| Substances/mixtures which, in contact with water, emit flammable gases | Category 2 |
| Respiratory Sensitization                                              | Category 1 |
| Skin Sensitization                                                     | Category 1 |
| Carcinogenicity                                                        | Category 2 |

**Label Elements****Signal Word**

Danger

**Hazard Statements**

In contact with water releases flammable gas

May cause an allergic skin reaction

May cause allergy or asthma symptoms or breathing difficulties if inhaled

Suspected of causing cancer

**Precautionary Statements****Prevention**

Obtain special instructions before use

Do not handle until all safety precautions have been read and understood

Handle under inert gas. Protect from moisture

Wear protective gloves/protective clothing/eye protection/face protection

Keep away from any possible contact with water, because of violent reaction and possible flash fire

Avoid breathing dust/fume/gas/mist/vapors/spray

In case of inadequate ventilation wear respiratory protection

Contaminated work clothing should not be allowed out of the workplace

**Response**

IF exposed or concerned: Get medical attention/advice

**Inhalation**

IF INHALED: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

**Skin**

IF ON SKIN: Wash with plenty of soap and water

Wash contaminated clothing before reuse

If skin irritation or rash occurs: Get medical advice/attention

**Fire**

Evacuate area

In case of fire: Use Dry chemical for extinction

**Storage**

Store locked up

Store in a dry place. Store in a closed container

**Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

**WARNING.** Cancer - <https://www.p65warnings.ca.gov/>.

### 3. Composition/Information on Ingredients

| Component                  | CAS-No     | Weight % |
|----------------------------|------------|----------|
| Nickel alloy, base , Ni,Al | 12635-29-9 | >95      |

### 4. First-aid measures

|                                            |                                                                                                                                                                                                                                                                            |
|--------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eye Contact</b>                         | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.                                                                                                                                                            |
| <b>Skin Contact</b>                        | Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.                                                                                                                                                                               |
| <b>Inhalation</b>                          | Move to fresh air. Obtain medical attention. If not breathing, give artificial respiration.                                                                                                                                                                                |
| <b>Ingestion</b>                           | Do not induce vomiting. Obtain medical attention.                                                                                                                                                                                                                          |
| <b>Most important symptoms and effects</b> | May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, |

**Notes to Physician** muscle pain or flushing  
Treat symptomatically

## 5. Fire-fighting measures

|                                         |                               |
|-----------------------------------------|-------------------------------|
| <b>Suitable Extinguishing Media</b>     | Dry chemical.                 |
| <b>Unsuitable Extinguishing Media</b>   | DO NOT USE WATER, FOAM OR CO2 |
| <b>Flash Point</b>                      | No information available      |
| <b>Method -</b>                         | No information available      |
| <b>Autoignition Temperature</b>         | Not applicable                |
| <b>Explosion Limits</b>                 |                               |
| <b>Upper</b>                            | No data available             |
| <b>Lower</b>                            | No data available             |
| <b>Sensitivity to Mechanical Impact</b> | No information available      |
| <b>Sensitivity to Static Discharge</b>  | No information available      |

### Specific Hazards Arising from the Chemical

Water reactive. Contact with water liberates extremely flammable gases. Thermal decomposition can lead to release of irritating gases and vapors.

### Hazardous Combustion Products

Hydrogen Thermal decomposition can lead to release of irritating gases and vapors Nickel oxides Fumes of aluminum or aluminum oxide.

### 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.

### NFPA

**Health**  
2

**Flammability**  
2

**Instability**  
2

**Physical hazards**  
W

## 6. Accidental release measures

|                                             |                                                                                                                                                                                                                        |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Personal Precautions</b>                 | Use personal protective equipment. Ensure adequate ventilation. Avoid dust formation. Avoid contact with skin, eyes and clothing.                                                                                      |
| <b>Environmental Precautions</b>            | Should not be released into the environment. See Section 12 for additional ecological information. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system. |
| <b>Methods for Containment and Clean Up</b> | Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. Do not expose spill to water.                                                                                     |

## 7. Handling and storage

|                 |                                                                                                                                                                                                                                                                                               |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Handling</b> | Ensure adequate ventilation. Wear personal protective equipment. Use only under a chemical fume hood. Avoid dust formation. Avoid contact with skin, eyes and clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not allow contact with water. Do not get water inside containers. |
| <b>Storage</b>  | Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from water. Keep under nitrogen. Flammables area.                                                                                                                                                          |

## 8. Exposure controls / personal protection

|                            |                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Exposure Guidelines</b> | This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies. |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|

| Component                  | ACGIH TLV | OSHA PEL                           | NIOSH IDLH                                                 | Mexico OEL (TWA) |
|----------------------------|-----------|------------------------------------|------------------------------------------------------------|------------------|
| Nickel alloy, base , Ni,Al |           | (Vacated) TWA: 1 mg/m <sup>3</sup> | IDLH: 10 mg/m <sup>3</sup><br>TWA: 0.015 mg/m <sup>3</sup> |                  |

Legend

OSHA - Occupational Safety and Health Administration

NIOSH IDLH: The National Institute for Occupational Safety and Health Immediately Dangerous to Life or Health

**Engineering Measures**

Use only under a chemical fume hood. Ensure that eyewash stations and safety showers are close to the workstation location.

**Personal Protective Equipment****Eye/face Protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin and body protection**

Wear appropriate protective gloves and clothing to prevent skin exposure.

**Respiratory Protection**

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

**Hygiene Measures**

Handle in accordance with good industrial hygiene and safety practice.

**9. Physical and chemical properties**

|                                        |                          |
|----------------------------------------|--------------------------|
| Physical State                         | Powder Solid             |
| Appearance                             | Grey                     |
| Odor                                   | Odorless                 |
| Odor Threshold                         | No information available |
| pH                                     | No information available |
| Melting Point/Range                    | 1350 °C / 2462 °F        |
| Boiling Point/Range                    | No information available |
| Flash Point                            | No information available |
| Evaporation Rate                       | Not applicable           |
| Flammability (solid,gas)               | No information available |
| Flammability or explosive limits       |                          |
| Upper                                  | No data available        |
| Lower                                  | No data available        |
| Vapor Pressure                         | No information available |
| Vapor Density                          | Not applicable           |
| Specific Gravity                       | 3.460                    |
| Solubility                             | Insoluble in water       |
| Partition coefficient; n-octanol/water | No data available        |
| Autoignition Temperature               | Not applicable           |
| Decomposition Temperature              | No information available |
| Viscosity                              | Not applicable           |
| Molecular Formula                      | Al Ni                    |
| Molecular Weight                       | 85.68                    |

**10. Stability and reactivity****Reactive Hazard**

Yes

**Stability**

Water reactive. Moisture sensitive. Air sensitive.

**Conditions to Avoid**

Avoid dust formation. Incompatible products. Excess heat. Exposure to air. Exposure to

moist air or water.

**Incompatible Materials** Strong oxidizing agents, Strong acids**Hazardous Decomposition Products** Hydrogen, Thermal decomposition can lead to release of irritating gases and vapors, Nickel oxides, Fumes of aluminum or aluminum oxide**Hazardous Polymerization** Hazardous polymerization does not occur.**Hazardous Reactions** Contact with water liberates extremely flammable gases.

## 11. Toxicological information

### Acute Toxicity

**Product Information** No acute toxicity information is available for this product**Component Information****Toxicologically Synergistic** No information available**Products****Delayed and immediate effects as well as chronic effects from short and long-term exposure****Irritation** May cause eye, skin, and respiratory tract irritation**Sensitization** May cause sensitization of susceptible persons**Carcinogenicity** Limited evidence of a carcinogenic effect.

| Component                     | CAS-No     | IARC       | NTP   | ACGIH      | OSHA       | Mexico     |
|-------------------------------|------------|------------|-------|------------|------------|------------|
| Nickel alloy, base ,<br>Ni,Al | 12635-29-9 | Not listed | Known | Not listed | Not listed | Not listed |

**Mutagenic Effects** No information available**Reproductive Effects** No information available.**Developmental Effects** No information available.**Teratogenicity** No information available.**STOT - single exposure** None known**STOT - repeated exposure** None known**Aspiration hazard** No information available**Symptoms / effects, both acute and delayed** Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing**Endocrine Disruptor Information** No information available**Other Adverse Effects** The toxicological properties have not been fully investigated.

## 12. Ecological information

### Ecotoxicity

Do not empty into drains. Do not flush into surface water or sanitary sewer system. May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

**Persistence and Degradability** Insoluble in water May persist**Bioaccumulation/ Accumulation** No information available.**Mobility** Is not likely mobile in the environment due its low water solubility.

### 13. Disposal considerations

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

### 14. Transport information

#### DOT

UN-No UN3208  
 Proper Shipping Name WATER-REACTIVE SOLID, N.O.S.  
 Proper technical name Nickel alloy, base , Ni,Al  
 Hazard Class 4.3  
 Packing Group II

#### TDG

UN-No UN3208  
 Proper Shipping Name WATER-REACTIVE SOLID, N.O.S.  
 Hazard Class 4.3  
 Packing Group II

#### IATA

UN-No UN3208  
 Proper Shipping Name Metallic substance, water-reactive, n.o.s  
 Hazard Class 4.3  
 Packing Group II

#### IMDG/IMO

UN-No UN3208  
 Proper Shipping Name Metallic substance, water-reactive, n.o.s  
 Hazard Class 4.3  
 Packing Group II

### 15. Regulatory information

All of the components in the product are on the following Inventory lists: No information available

#### International Inventories

##### Legend:

X - Listed

E - Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.

F - Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.

N - Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.

P - Indicates a commenced PMN substance

R - Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.

S - Indicates a substance that is identified in a proposed or final Significant New Use Rule

T - Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

#### U.S. Federal Regulations

TSCA 12(b) Not applicable

SARA 313 Not applicable

| Component                  | CAS-No     | Weight % | SARA 313 - Threshold Values % |
|----------------------------|------------|----------|-------------------------------|
| Nickel alloy, base , Ni,Al | 12635-29-9 | >95      | 0.1                           |

SARA 311/312 Hazard Categories See section 2 for more information

**CWA (Clean Water Act)**

Not applicable

| Component                  | CWA - Hazardous Substances | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants |
|----------------------------|----------------------------|-----------------------------|------------------------|---------------------------|
| Nickel alloy, base , Ni,Al | -                          | -                           | X                      | -                         |

**Clean Air Act**

Not applicable

| Component                  | HAPS Data | Class 1 Ozone Depletors | Class 2 Ozone Depletors |
|----------------------------|-----------|-------------------------|-------------------------|
| Nickel alloy, base , Ni,Al | X         |                         | -                       |

**OSHA** Occupational Safety and Health Administration  
Not applicable

**CERCLA**

Not applicable

**California Proposition 65**

This product does not contain any Proposition 65 chemicals

| Component                  | CAS-No     | California Prop. 65 | Prop 65 NSRL | Category   |
|----------------------------|------------|---------------------|--------------|------------|
| Nickel alloy, base , Ni,Al | 12635-29-9 | Carcinogen          | -            | Carcinogen |

**U.S. State Right-to-Know Regulations**

| Component                  | Massachusetts | New Jersey | Pennsylvania | Illinois | Rhode Island |
|----------------------------|---------------|------------|--------------|----------|--------------|
| Nickel alloy, base , Ni,Al | -             | X          | X            | X        | X            |

**U.S. Department of Transportation**

Reportable Quantity (RQ): N  
DOT Marine Pollutant N  
DOT Severe Marine Pollutant N

**U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

**Other International Regulations****Mexico - Grade**

No information available

**16. Other information****Prepared By**

Regulatory Affairs  
Thermo Fisher Scientific  
Email: EMSDS.RA@thermofisher.com

**Creation Date**

24-Jun-2009

**Revision Date**

19-Jan-2018

**Print Date**

19-Jan-2018

**Revision Summary**

This document has been updated to comply with the US OSHA HazCom 2012 Standard replacing the current legislation under 29 CFR 1910.1200 to align with the Globally Harmonized System of Classification and Labeling of Chemicals (GHS).

**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 SDS**