

SAFETY DATA SHEET

Revision Date 25-Feb-2020 Revision Number 4

1. Identification

Product Name Nickel Aluminum

CAS No 12635-27-7

Synonyms No information available

Recommended Use Laboratory chemicals.

Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Stanford Advanced Materials

E-mail: sales@samaterials.com

Tel: (949) 407-8904

Address: 23661 Birtcher Dr., Lake Forest, CA 92630 U.S.A.

Emergency Telephone Number

During normal business hours (Monday-Friday, 8am-7pm EST), call (949) 407-8904

2. Hazard(s) identification

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable solids Category 2

Substances/mixtures which, in contact with water, emit Category 2

flammable gases

Skin Sensitization Category 1
Carcinogenicity Category 2

Label Elements

Signal Word

Danger

Hazard Statements

Nickel Aluminum

Flammable solid In contact with water releases flammable gas May cause an allergic skin reaction Suspected of causing cancer



Precautionary Statements

Prevention

Obtain special instructions before use

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

Use personal protective equipment as required

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

Contaminated work clothing should not be allowed out of the workplace

Wear protective gloves

Keep away from heat/sparks/open flames/hot surfaces. - No smoking

Ground/bond container and receiving equipment

Use explosion-proof electrical/ventilating/lighting equipment

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

Handle under inert gas. Protect from moisture

Response

IF exposed or concerned: Get medical attention/advice

Skin

IF ON SKIN: Wash with plenty of soap and water

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

Wash contaminated clothing before reuse

Brush off loose particles from skin. Immerse in cool water/wrap with wet bandages

Fire

In case of fire: Use CO2, dry chemical, or foam 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)

None identified

3. Composition/Information on Ingredients

Component	CAS No	Weight %			
Aluminum alloy, base, Al 50,Ni 50	12635-27-7	<=100			

4. First-aid measures

Eye Contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes.

Inhalation Remove to fresh air.

Nickel Aluminum

Ingestion Do NOT induce vomiting.

Most important symptoms and

effects

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, muscle pain or flushing

Notes to Physician Treat symptomatically

5. Fire-fighting measures

Unsuitable Extinguishing Media No information available

Flash Point No information available Method - No information available

Autoignition Temperature

Explosion Limits

No information available

Upper
Lower
No data available
No data available
Sensitivity to Mechanical Impact
Sensitivity to Static Discharge
No information available
No information available

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

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	F	lammability		Instability	PI	Physical hazards				
2	 	2	 	0			W			
	1.1									

6. Accidental release measures

Personal Precautions
Environmental Precautions

Ensure adequate ventilation. Use personal protective equipment as required. See Section 12 for additional Ecological Information. Should not be released into the environment. Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean No information available. Up

7. Handling and storage

Handling Ensure adequate ventilation.

Storage. Keep under nitrogen. Incompatible Materials. .

8. Exposure controls / personal protection

Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies.

Engineering Measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Wear appropriate protective eyeglasses or chemical safety goggles as described by **Eye/face Protection**

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

Powder Solid **Physical State Appearance** Grey Black

Odor Odor Threshold

pН

No data available Melting Point/Range **Boiling Point/Range Flash Point**

Evaporation Rate

Flammability (solid,gas)

Flammability or explosive limits

Upper Lower **Vapor Pressure Vapor Density Specific Gravity**

Solubility

Partition coefficient; n-octanol/water

Autoignition Temperature Decomposition Temperature

Viscosity

No information available

No information available

Not applicable

No information available No information available

Not applicable

No information available

No data available No data available No information available

Not applicable

No information available No information available No data available

No information available No information available

Not applicable

10. Stability and reactivity

Yes **Reactive Hazard**

Stability Water reactive.

Conditions to Avoid Incompatible products.

Incompatible Materials

Hazardous Decomposition Products Nickel oxides, Fumes of aluminum or aluminum oxide

Hazardous Polymerization Hazardous polymerization does not occur.

None under normal processing. **Hazardous Reactions**

11. Toxicological information

Acute Toxicity

Product Information Component Information

Toxicologically Synergistic

Products

No information available

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

Irritation No information available

Sensitization May cause sensitization by skin contact

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
Aluminum alloy, base,	12635-27-7	Not listed				
Al 50,Ni 50	,		1 1		1 1	1 1

No information available **Mutagenic Effects**

Reproductive Effects No information available.

Developmental Effects No information available.

Teratogenicity No information available.

None known STOT - single exposure STOT - repeated exposure None known

No information available Aspiration hazard

delayed

Symptoms / effects, both acute and 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

May cause long-term adverse effects in the environment. Do not allow material to contaminate ground water system.

Persistence and Degradability May persist

Bioaccumulation/ Accumulation No information available.

No information available. **Mobility**

13. Disposal considerations

Chemical waste generators must determine whether a discarded chemical is classified as a **Waste Disposal Methods**

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

Proper Shipping Name METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S.

Technical Name Aluminum alloy, base, Al 50, Ni 50

Hazard Class 4.3 **Packing Group** Ш

TDG

UN-No UN3208

METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S. **Proper Shipping Name**

4.3 Hazard Class 11 **Packing Group**

IATA

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UN-No UN3208

Proper Shipping Name METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S.

Hazard Class 4.3
Packing Group

IMDG/IMO

UN-No UN3208
Proper Shipping Name UN3208 METALLIC SUBSTANCE, WATER-REACTIVE, N.O.S.

Hazard Class 4.3 Packing Group

15. Regulatory information

United States of America Inventory

Component	CAS No	TSCA	TSCA Inventory notification - Active/Inactive	TSCA - EPA Regulatory Flags
Aluminum alloy, base, Al 50,Ni 50	12635-27-7	-	-	-

Legend:

TSCA - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed '-' - Not Listed

TSCA 12(b) - Notices of Export

Not applicable

International Inventories

X = listed, U.S.A. (TSCA), Canada (DSL/NDSL), Europe (EINECS/ELINCS/NLP), Australia (AICS), Korea (KECL), China (IECSC), Japan (ENCS), Philippines (PICCS), Japan (ISHL), Japan (ISHL).

Component	CAS No	DSL	NDSL	EINECS	PICCS	ENCS	ISHL	AICS	IECSC	KECL
Aluminum alloy, base, Al 50,Ni 50	12635-27-7	· -	1-	12.	- '	- '		-		

U.S. Federal Regulations

SARA 313 Not applicable

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

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and

Health Administration

Not applicable

CERCLA Not applicable

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know

Regulations

Not applicable

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.

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Other International Regulations

Mexico - Grade

No information available

16. Other information

Prepared By Stanford Advanced Materials

Revision Date 25-Feb-2020 Print Date 25-Feb-2020

Revision Summary SDS authoring systems update, replaces ChemGes SDS No. 1,914. Initial Release.

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