Stainless Steel Welding Stud

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name : Stainless Steel Welding Stud

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.3. Details of the supplier of the safety data sheet

Nelson Stud Welding
7900 West Ridge Road
Elyria, Ohio 44036-2019
(440) 329-0400

1.4. Emergency telephone number

Emergency number : (440) 329-0400

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Acute Tox. 4 (Oral)	H302
Skin Sens. 1	H317
Carc. 1B	H350
STOT RE 1	H372

Full text of H-phrases: see section 16

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :

GHS07 GHS08

Signal word (GHS-US) : Danger

Hazard statements (GHS-US) :
H302 - Harmful if swallowed
H317 - May cause an allergic skin reaction
H350 - May cause cancer
H372 - Causes damage to organs through prolonged or repeated exposure

Precautionary statements (GHS-US) :
P201 - Obtain special instructions before use
P260 - Do not breathe dust
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P272 - Contaminated work clothing must not be allowed out of the workplace
P301+P312 - If swallowed: Call doctor if you feel unwell
P314 - Get medical advice/attention if you feel unwell
P330 - Rinse mouth

2.3. Other hazards

Other hazards not contributing to the classification : Contains gas under pressure; may explode if heated.

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	GHS-US classification
Iron	(CAS No) 7439-89-6	48 - 86	Acute Tox. 4 (Oral), H302
Nickel	(CAS No) 7440-02-0	0 - 22	Skin Sens. 1, H317 Carc. 1B, H350 STOT RE 1, H372
Molybdenum	(CAS No) 7439-98-7	0 - 3	Acute Tox. 4 (Dermal), H312

Full text of H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Call a doctor.

First-aid measures after inhalation : Call a physician if you feel unwell. If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

First-aid measures after skin contact : Rinse skin with water/shower. Brush off loose particles from skin. Rinse immediately contaminated clothing and skin with plenty of water before removing clothes. Wash contaminated clothing before reuse. Gently wash with plenty of soap and water. Get medical advice/attention. If skin irritation or rash occurs:

First-aid measures after eye contact : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Direct contact with the eyes is likely to be irritating. If eye irritation persists: Get medical advice/attention.

First-aid measures after ingestion : Rinse mouth. Call a physician if you feel unwell. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating. Causes serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

No additional information available

5.2. Special hazards arising from the substance or mixture

Fire hazard : Not flammable.

5.3. Advice for firefighters

Firefighting instructions : Exercise caution when fighting any chemical fire. Evacuate area. Eliminate all ignition sources if safe to do so. In case of fire: Stop leak if safe to do so.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Remove ignition sources. No open flames. No smoking.

6.1.1. For non-emergency personnel

No additional information available

6.1.2. For emergency responders

Protective equipment : Avoid breathing vapor from welding.

Emergency procedures : Stop release.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : On land, sweep or shovel into suitable containers.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : No open flames. No smoking. Use personal protective equipment as required. Protect from moisture. Avoid breathing vapor from welding. Do not get in eyes, on skin, or on clothing.

Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. Wash contaminated clothing before reuse. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep container tightly closed. Heat sources. Store in a dry place. Protect from moisture. Keep cool.

Incompatible products : Oxidizing agent.

Incompatible materials : Heat sources. Combustible materials.

Storage area : Store in a well-ventilated place.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Stainless Steel Welding Stud	
ACGIH	Not applicable
OSHA	Not applicable

Iron (7439-89-6)	
ACGIH	Not applicable
OSHA	Not applicable

Nickel (7440-02-0)		
ACGIH	ACGIH TWA (mg/m³)	1.5 mg/m³ (inhalable fraction)
OSHA	OSHA PEL (TWA) (mg/m³)	1 mg/m³

Molybdenum (7439-98-7)		
ACGIH	ACGIH TWA (mg/m³)	10-3 mg/m3
OSHA	OSHA PEL (TWA) (mg/m³)	10 mg/m3 (Inhalable fraction) 3 mg/m3 (Respirable fraction)

8.2. Exposure controls

Eye protection : Chemical goggles or face shield.

Skin and body protection : Wear suitable protective clothing.

Respiratory protection : Wear respiratory protection. In case of inadequate ventilation wear respiratory protection. Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.

Consumer exposure controls : Avoid contact during pregnancy/while nursing.

Other information : Do not breathe vapor from welding. Do not eat, drink or smoke when using this product.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Solid

Color : Mixture contains one or more component(s) which have the following colour(s):
Light grey Black Dark Grey dark grey Metallic white Silver

Odor : Odourless.

Odor threshold : No data available

pH : No data available

Relative evaporation rate (butyl acetate=1) : No data available

Melting point : No data available

Freezing point : No data available

Boiling point : No data available

Flash point : No data available

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

No additional information available

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

Sparks. Open flame. Overheating. Moisture.

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

May release flammable gases. Thermal decomposition generates : Corrosive vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Oral: Harmful if swallowed.

Stainless Steel Welding Stud	
ATE US (oral)	1144.186 mg/kg body weight

Iron (7439-89-6)	
LD50 oral rat	984 mg/kg
ATE US (oral)	984.000 mg/kg body weight

Nickel (7440-02-0)	
LD50 oral rat	> 9000 mg/kg

Molybdenum (7439-98-7)	
LD50 oral rat	5000 mg/kg
LD50 dermal rabbit	2000 mg/kg
LC50 inhalation rat (mg/l)	5.84 mg/l 4 hours
ATE US (oral)	5000.000 mg/kg body weight
ATE US (dermal)	2000.000 mg/kg body weight
ATE US (vapors)	5.840 mg/l/4h
ATE US (dust, mist)	5.840 mg/l/4h

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: May cause cancer.

Nickel (7440-02-0)	
IARC group	2B - Possibly carcinogenic to humans
National Toxicology Program (NTP) Status	3 - Reasonably anticipated to be Human Carcinogen

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

Specific target organ toxicity (repeated exposure) : Causes damage to organs through prolonged or repeated exposure.

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms : Harmful if swallowed. Harmful in contact with skin. Harmful if inhaled.

Symptoms/injuries after inhalation : May cause respiratory irritation. May cause drowsiness or dizziness.

Symptoms/injuries after skin contact : Causes skin irritation.

Symptoms/injuries after eye contact : Direct contact with the eyes is likely to be irritating. Causes serious eye damage.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water : Harmful to aquatic life. Toxic to aquatic life. May cause long lasting harmful effects to aquatic life. Harmful to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. Very toxic to aquatic life with long lasting effects.

Nickel (7440-02-0)	
LC50 fish 1	> 100 mg/l (Exposure time: 96 h - Species: Brachydanio rerio)
EC50 Daphnia 1	> 100 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	1.3 mg/l (Exposure time: 96 h - Species: Cyprinus carpio [semi-static])
EC50 Daphnia 2	1 mg/l (Exposure time: 48 h - Species: Daphnia magna [Static])

12.2. Persistence and degradability

Stainless Steel Welding Stud	
Persistence and degradability	May cause long-term adverse effects in the environment.

Iron (7439-89-6)	
Persistence and degradability	May cause long-term adverse effects in the environment.

Nickel (7440-02-0)	
Persistence and degradability	May cause long-term adverse effects in the environment.

Molybdenum (7439-98-7)	
Persistence and degradability	Not established.

12.3. Bioaccumulative potential

Molybdenum (7439-98-7)	
Bioaccumulative potential	Not established.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer :

Effect on the global warming : No known ecological damage caused by this product.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of contents/container to meet all regulations. Container under pressure. Do not drill or burn even after use.

Additional information : Clean up even minor leaks or spills if possible without unnecessary risk.

SECTION 14: Transport information

In accordance with DOT

Not evaluated

Additional information

Other information : No supplementary information available.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

Iron (7439-89-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Nickel (7440-02-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Subject to reporting requirements of United States SARA Section 313	
SARA Section 313 - Emission Reporting	0.1 %

15.2. International regulations

CANADA

Iron (7439-89-6)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

Nickel (7440-02-0)	
Listed on the Canadian DSL (Domestic Substances List)	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects Class D Division 2 Subdivision B - Toxic material causing other toxic effects

EU-Regulations

Iron (7439-89-6)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Nickel (7440-02-0)
Listed on the EEC inventory EINECS (European Inventory of Existing Commercial Chemical Substances)

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

Not classified

15.2.2. National regulations

Iron (7439-89-6)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Listed on INSQ (Mexican national Inventory of Chemical Substances) Listed on Turkish inventory of chemical

Nickel (7440-02-0)
Listed on the AICS (Australian Inventory of Chemical Substances) Listed on IECSC (Inventory of Existing Chemical Substances Produced or Imported in China) Listed on the Korean ECL (Existing Chemicals List) Listed on NZIoC (New Zealand Inventory of Chemicals) Listed on PICCS (Philippines Inventory of Chemicals and Chemical Substances) Japanese Pollutant Release and Transfer Register Law (PRTR Law) Listed on the Canadian IDL (Ingredient Disclosure List) Listed on INSQ (Mexican national Inventory of Chemical Substances) Listed on Turkish inventory of chemical

15.3. US State regulations

Nickel (7440-02-0)				
U.S. - California - Proposition 65 - Carcinogens List	U.S. - California - Proposition 65 - Developmental Toxicity	U.S. - California - Proposition 65 - Reproductive Toxicity - Female	U.S. - California - Proposition 65 - Reproductive Toxicity - Male	Non-significant risk level (NSRL)
Yes	No	No	No	

Nickel (7440-02-0)
U.S. - Massachusetts - Right To Know List U.S. - New Jersey - Right to Know Hazardous Substance List U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances U.S. - Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Full text of H-phrases:

------	Acute Tox. 4 (Dermal)	Acute toxicity (dermal) Category 4
------	Acute Tox. 4 (Oral)	Acute toxicity (oral) Category 4
------	Carc. 1B	Carcinogenicity Category 1B
------	Skin Sens. 1	Skin sensitization Category 1
------	STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
------	H302	Harmful if swallowed
------	H312	Harmful in contact with skin
------	H317	May cause an allergic skin reaction
------	H350	May cause cancer
------	H372	Causes damage to organs through prolonged or repeated exposure

GHS US SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product