JELLIFF

Wire Products Since 1880

354 PEQUOT AVENUE
SOUTHPORT CT 06890 USA
Tel: 203-259-1615 Fax: 203-255-7908
Toll-Free: 800-243-0052
sales@jelliff.net
WWW.JELLIFF.COM

DATA SAFETY SHEET ISSUED: JUNE 1, 2018

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

1.1. Product identifier: Alloy 800

1.2. Relevant identified uses of the substance or mixture and uses advised against: Industrial use in Resistance and thermo technology.

1.3. Details of the supplier of the safety data sheet:

Jelliff Corporation
354 Pequot Ave
Southport, CT 06890 USA

Telephone: 203-259-1615
Fax: 203-255-7908
Email: wiresales@jelliff.net

1.4. Emergency telephone number:

Telephone: 203-259-1615

SECTION 2: Hazards identification

2.1. **Classification of the substance or mixture**

Alloys containing nickel are classified for skin sensitization when the release rate of 0,5 microgramm Ni/cm2/week, as measured by the European Standard reference test method EN 1811, is exceeded.

2.2. **Label elements**

Signal word: Warning

EUH208 - 'Contains Nickel. May produce an allergic reaction'

2.3. **Other hazards**

The product does not contain any PBT resp. vPvB-substance according Annex XIII 1907/2006/EG.

SECTION 3: Composition/information on ingredients

3.1. **Substances**

Description: Mixture of the following substances

Description	Classification	Quantity
Nickel CAS: 7440-02-0 EC-No: 231-111-4 Index-Nr: 028-002-00-7	H351: Suspected of causing cancer. H372: Causes damage to organs through prolonged or repeated exposure. H317: May cause an allergic skin reaction H412: Harmful to aquatic life with long lasting effects.	70 - 75,0 %
Chrome CAS: 7440-47-3 EG-Nr.: 231-157-5 Index-Nr.: ---	Suspected of causing cancer, Category 1B; H351i Skin sensitivity, Category 1; H317 Hazardous to aquatic environment, Category 1; H400 Hazardous to aquatic environment, Chronic, Category 1; H410	< 20,00 %
Silicone CAS: 7440-21-3 EG-Nr.: 231-130-8 Index-Nr.: --- REACh: 01-2119480401-47-0068	Flammable solid, Category 2; H228 Causes serious eye irritation, Category 2; H319	< 2,00 %
Iron CAS: 7439-89-6 EG-Nr.: 231-096-4 Index-Nr.: ---	Flammable solid, Category 2; H228	0,30-50,00 %
Manganese CAS: 7439-96-5 EG-Nr.: 231-105-1 Index-Nr.: ---	Flammable solid, Category 2; H228	0,1-1,00 %
Aluminum CAS: 7429-90-5 EG-Nr.: 231-072-3 Index-Nr.: ---	No hazardous substance according GHS/CLP	< 5 %

.

SECTION 4: First aid measures

Eyes:

Rinse the affected eye with widely spread lids for 10 minutes under running water while protecting the unimpaired eye. Arrange medical treatment.

Skin:

Remove contaminated clothing while protecting yourself. Immediately cleanse the affected skin areas with soap under running water. In case of subjectively or objectively visible irritations:
Arrange medical treatment.

Respiratory tract:

Whilst protecting yourself remove the casualty from the hazardous area and take him to the fresh air. Lay the casualty down in a quiet place and protect him against hypothermia. If irritations are noted in the area of the respiratory tract (oppressive feeling in the chest, coughing)
In the case of breathing difficulties have the casualty inhale oxygen. As soon as possible repeatedly have the casualty deeply breath a glucocorticoid inhalation spray in. Arrange medical treatment.

Swallowing:

Give the casualty milk to drink. If the casualty is conscious have him drink copious amounts of liquids (water). Make the casualty vomit. Arrange medical treatment.

Information for physicians:

Acute toxicities caused by NP have been observed only in rare cases, if at all. The severity of a corresponding potential depends substantially on a prior sensitization (or cross sensitization), which occurs relatively often after non-industrial influences. It must be mentioned that 'nickel vapors' chiefly contain nickel oxide that must undergo a toxicological assessment that is different from the assessment of NP.

SECTION 5: Firefighting measures

5.1. **Suitable extinguishing media:** Water (spray - not splash), foam, sand

5.2. **Instructions:** Seek immediate cover in case of sudden release and raising of large quantities of dust. If possible, take container out of dangerous zone. Shut off sources of ignition.

5.3. **Special protective equipment:** Wear self-contained breathing apparatus. Wear a special tightly sealed suit.

5.4. **Special hazards arising from the substance or mixture**

In case of fire it can be released: Nickel-oxide vapor

Advice for firefighters: Areas in which the substance can arise as a dust in such quantities that a dust explosion could occur are to be considered as at a risk of explosion. Keep away from sources of ignition (e.g. open flames, heat sources and sparks).

SECTION 6: Accidental release measures

6.1. **Personal precautions, protective equipment and emergency procedures**

Wear respiratory protection, eye protection, hand protection and body protection (see chapter Personal Protection). Carefully sweep up, gather and remove. Avoid rising dust.
Afterwards ventilate area and wash spill site.

6.2. **Environmental precautions**

Not applicable

6.3. **Endangerment of water:**

Hazard to waters. Inform the responsible authorities when larger quantities get into water, drainage, sewer, or the ground.

6.4. **Reference to other sections**

Not applicable

SECTION 7: Handling and storage

7.1. **Precautions for safe handling**

Work areas should be physically separated if possible. Provision of good ventilation in the working area. The floor should not have a floor drain. Washing facility at the workplace required.

7.2. **Conditions for safe storage, including any incompatibilities**

Storage class 10 - 13 (Other liquids and solids)
Only substances of the same storage class should be stored together.
Collocated storage with the following substances is prohibited:

- Pharmaceuticals, foods, and animal feeds including additives.
- Infectious, radioactive und explosive substances.
- Strongly oxidizing substances of storage class 5.1A.

Under certain conditions the collocated storage with the following sub-stances is permitted (For more details see TRGS 510):

- Gases.
- Flammable liquids of storage class 3.
- Other explosive substances of storage class 4.1A.
- Spontaneously flammable substances.
- Substances liberating flammable gases in contact with water.
- Oxidizing substances of storage class 5.1B.
- Ammonium nitrate and preparations containing ammonium nitrate.
- Organic peroxides and self-reactive substances.
- Combustible and non-combustible acutely toxic substances of storage classes 6.1A and 6.1B.

The substance should not be stored with substances with which hazardous chemical reactions are possible.

7.3. **Specific end use(s)**

Not applicable

SECTION 8: Exposure controls/personal protection

8.1. **Control parameters**

Manganese and its inorganic compounds: AGW=0,5 mg/m³ (einatembare Fraktion)
Nickel and its compounds: MAK=3 mg/m³

8.2. **Exposure controls**

Body protection:

Depending on the risk, wear a tight, long apron and boots or suitable chemical protection clothing. Wear dust tight protective clothing.

Respiratory protection:

In an emergency (e.g.: unintentional release of the substance) respiratory protection must be worn. Consider the maximum period for wear .Respiratory protection: Particle filter P2 or P3, recommended P3, color code white. Use insulating device for concentrations above the usage limits for filter devices, for oxygen concentrations below 17% volume, or in circumstances which are unclear.

Eye protection:

Sufficient eye protection should be worn. Wear glasses with side protection.

Hand protection:

Use protective gloves. The glove material must be sufficiently impermeable and resistant to the substance. Check the tightness before wear. Gloves should be well cleaned before being removed, then stored in a well ventilated location. Pay attention to skin care. Skin protection creams do not protect sufficiently against the substance. Textile or leather gloves are completely unsuitable. Currently there is no information available regarding suitable glove materials.

Industrial hygiene:

Foods, beverages and other articles of consumption must not be consumed at the work areas. Suitable areas are to be designated for these purposes. Avoid contact with skin. In case of contact wash skin. Avoid inhalation of dust. Avoid contact with clothing.
Contaminated clothes must be exchanged and cleaned carefully.
Before a break it might be necessary to change clothes.
Provide washrooms with showers and if possible rooms with separate storage for street clothing and work clothing. The skin must be washed with soap and water before breaks and at the end of work. Apply fatty skin-care products after washing.

SECTION 9: Physical and chemical properties

9.1. **Information on basic physical and chemical properties**

(a) Appearance: bronze
(b) Odor: neutrally
(c) Odor threshold: n.a.
(d) pH: n.a.
(e) Melting point/freezing point: n.a.
(f) Initial boiling point and boiling range: 1180-1450°C
(g) Flash point: n.a.
(h) Evaporation rate: n.a.
(i) Flammability (solid, gas): n.a.
(j) Upper/lower flammability or explosive limits: n.a.
(k) Vapor pressure: n.a.
(l) Vapor density: n.a.
(m) Relative density: n.a.
(n) Solubility(ies): n.a.
(o) Partition coefficient: n-octanol/water: n.a. *(…continues on page 5…)*
(p) Auto-ignition temperature: n.a.
(q) Decomposition temperature: n.a.
(r) Viscosity: n.a.
(s) Explosive properties: n.a.
(t) Oxidizing properties: n.a.

9.2. **Other information**

No other information available.

SECTION 10: Stability and reactivity

10.1. **Conditions to avoid:** Avoid the initiation of dust or smoke.
10.2. **Incompatible materials:** Can react with acids or oxygen carriers
10.3. **Hazardous decomposition products:** Hazardous metal oxide smoke.

SECTION 11: Toxicological information

11.1. **Information on toxicological effects Angaben zu toxikologischen Wirkungen**

Acute effects: Irritation of the respiratory tract, sensitizing potential; Chronic effects: Allergic skin damage.

SECTION 12: Ecological information

12.1. **Toxicity**

LC50 Fish (96 hours)
Minimum: 0,0000475 mg/l
Maximum: 350 mg/l
Median: 40 mg/l
Study number: 33

12.2. **Persistence and degradability**

Inorganic substances are not degradable.

12.3. **Bioaccumulative potential**

Not available

12.4. **Mobility in soil**

Not available

12.5. **Results of PBT and vPvB assessment**

Not available

12.6. **Other adverse effects**

Not available

SECTION 13: Disposal considerations

13.1. **Waste treatment methods**

It is needed to dispose under attention of the local waste regulations.

SECTION 14: Transport information

The product itself is no dangerous good according ADR/RID

SECTION 15: Regulatory information

15.1. **Safety, health and environmental regulations/legislation specific for the substance or mixture**

European legislations

1907/2007/EG (REACh) Annex XVII, Number 27:

Nickel and nickel compounds are not permitted in: - the first ear studs that are put into pierced ears or other pierced body parts - products that will come into direct contact with skin for any length of time (e.g. earrings, necklaces, rings)

Preventive medical check-ups: Preventive medical check-ups have to be offered if during activities involving the substance the worker is exposed to it. Preventive medical check-ups have to be offered for workers welding and cutting metal in environments whose air contains up to 3 milligrams per cubic meter of welding smoke. The employer shall request regular preventive medical check-ups if the substance is subject to dermal absorption and such absorption could endanger health and safety of the worker. The employer shall request regular preventive medical check-ups for workers cutting or welding metal in environments whose air contains more than 3 milligrams per cubic meter of welding smoke. Deadlines for the inducement or proposal of preventive medical check-ups are to gather from the Occupational Health Rules (Occupational Health Rules) “AMR Number 2.1”.

Technical Instructions on air quality control (TA Luft):

Chapter 5.2.2 Inorganic dusts
Class II
Also with the presence of several substances of the same class, the following values are in all not allowed to be exceeded in the exhaust gas:

Mass flow: 2,5 g/hr
or
Mass conc.: 0,5 mg/m³
Specified as Ni.

Chapter 5.2.2 Inorganic dusts
Class III
Also with the presence of several substances of the same class, the following values are in all not allowed to be exceeded in the exhaust gas:
Mass flow: 5 g/hr

or
Mass conc.: 1 mg/m³
Specified as Mn resp. Cu.

15.2. **Chemical safety assessment**

For the mixture is no chemical safety assessment performed.

SECTION 16: Other information

Source of data which was used for the preparation of this document:
GESTIS substance database of the Association of Occupational Accident Insurance Funds (http://www.dguv.de/ifa/de/gestis/stoffdb/index.jsp) zuletzt aufgerufen am 26.11.2013
Regulation (EG) Nr. 1907/2006 (REACH), 1272/2008 (CLP)
This information is based on our present knowledge and experience. The safety data sheet is to describe the products in terms of their safety requirements. The information does not have the meaning of guarantees on properties of the product.