**Silver Braze 85Ni15**  
Safety Data Sheet  
according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Date of issue: 11/30/2015    Revision date: 1/6/2017    Supersedes: 1.1    Version: 1.2

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

### 1.1. Product identifier

<table>
<thead>
<tr>
<th>Product form</th>
<th>Article</th>
</tr>
</thead>
<tbody>
<tr>
<td>Product name</td>
<td>Silver Braze 85Ni15</td>
</tr>
<tr>
<td>Type of product</td>
<td>Alloy</td>
</tr>
</tbody>
</table>

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

#### 1.2.1. Relevant identified uses

- Main use category: Professional use
- Industrial/Professional use spec: For professional use only
- Use of the substance/mixture: Brazing
- Function or use category: Welding, cutting, heating and brazing

#### 1.2.2. Uses advised against

No additional information available

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

The Prince & Izant Companies  
12999 Plaza Drive  
44130 Cleveland, Ohio - USA  
T 001-216-362-7000 - F 001-216-362-7456  
support@princeizant.com - www.princeizant.com

### 1.4. Emergency telephone number

- Emergency number:  
  - Global: +44 1865 407333 (NCEC)  
  - USA: +1 202 464 2554 (NCEC)

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

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

- Sensitisation — Skin, Category 1: H317
- Carcinogenicity, Category 2: H351
- Specific target organ toxicity — Repeated exposure, Category 1: H372

Full text of H statements: see section 16

**Adverse physicochemical, human health and environmental effects**

Suspected of causing cancer. May cause damage to organs through prolonged or repeated exposure. May cause an allergic skin reaction. Very toxic to aquatic life with long lasting effects.

### 2.2. Label elements

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

- Hazard pictograms (CLP): ![GHS07](image) ![GHS08](image)
- Signal word (CLP): Danger
- Hazardous ingredients: nickel
- Hazard statements (CLP):  
  - H317 - May cause an allergic skin reaction  
  - H351 - Suspected of causing cancer (if inhaled)  
  - H372 - Causes damage to organs through prolonged or repeated exposure
- Precautionary statements (CLP):  
  - P201 - Obtain special instructions before use  
  - P202 - Do not handle until all safety precautions have been read and understood  
  - P260 - Do not breathe dust, fume  
  - P264 - Wash hands, forearms and face thoroughly after handling  
  - P270 - Do not eat, drink or smoke when using this product  
  - P272 - Contaminated work clothing should not be allowed out of the workplace  
  - P280 - Wear protective gloves, eye protection, face protection, protective clothing
P302+P352 - IF ON SKIN: Wash with plenty of soap and water
P314 - Get medical advice/attention if you feel unwell
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P362+P364 - Take off contaminated clothing and wash it before reuse
P405 - Store locked up
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation

2.3. Other hazards
Other hazards not contributing to the classification : None under normal conditions.

SECTION 3: Composition/information on ingredients
3.1. Substance
Not applicable
3.2. Mixture

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silver substance with a Community workplace exposure limit</td>
<td>(CAS No) 7440-22-4 (EC no) 231-131-3</td>
<td>&gt;= 80</td>
<td>Not classified</td>
</tr>
<tr>
<td>nickel (Note S)(Note 7)</td>
<td>(CAS No) 7440-02-0 (EC no) 231-111-4 (EC index no) 028-002-00-7</td>
<td>10 - 20</td>
<td>Carc. 2, H351, STOT RE 1, H372 Skin Sens. 1, H317</td>
</tr>
</tbody>
</table>

Note 7 : Alloys containing nickel are classified for skin sensitisation when the release rate of 0,5 μg Ni/cm²/week, as measured by the European Standard reference test method EN 1811, is exceeded.
Note S : This substance may not require a label according to Article 17 (see section 1.3 of Annex I) (Table 3.1). This substance may not require a label according to Article 23 of Directive 67/548/EEC (see section 8 of Annex VI to that Directive) (Table 3.2).
Full text of H-statements: see section 16

SECTION 4: First aid measures
4.1. Description of first aid measures
First-aid measures general : IF exposed or concerned: Get medical advice/attention.
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention.
First-aid measures after skin contact : Wash skin with plenty of water. Take off contaminated clothing. If skin irritation or rash occurs: Get medical advice/attention.
First-aid measures after eye contact : Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion : Rinse mouth. Do not induce vomiting. Get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries after inhalation : May cause respiratory irritation. May cause cancer by inhalation.
Symptoms/injuries after skin contact : May cause an allergic skin reaction.
Symptoms/injuries after eye contact : Dust from this product may cause eye irritation.
Symptoms/injuries after ingestion : May cause irritation to the respiratory tract and to other mucous membranes.

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

SECTION 5: Firefighting measures
5.1. Extinguishing media
Suitable extinguishing media : Dry powder. Use extinguishing media appropriate for surrounding fire.

5.2. Special hazards arising from the substance or mixture
Fire hazard : The product is not flammable.
Explosion hazard : Product is not explosive.
Reactivity in case of fire : Not known.
Hazardous decomposition products in case of fire : Toxic fumes may be released.

5.3. Advice for firefighters
Precautionary measures fire : No special measures required.
Firefighting instructions : Use extinguishing media appropriate for surrounding fire.
Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures: Avoid release to the environment.

6.1.1. For non-emergency personnel

Protective equipment: Wear suitable protective clothing, gloves and eye or face protection.

Emergency procedures: Ventilate spillage area. Avoid dust formation. Do not breathe dust, fume. Avoid contact with skin and eyes.

Measures in case of dust release: Where excessive dust may result, use approved respiratory protection equipment.

6.1.2. For emergency responders

Protective equipment: Do not attempt to take action without suitable protective equipment. Wear suitable protective clothing, gloves and eye or face protection. For further information refer to section 8: "Exposure controls/personal protection". Avoid contact with skin and eyes. Do not breathe Dust, smokes.

Emergency procedures: Ventilate area. Avoid dust formation.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

For containment: Collect spillage.

Methods for cleaning up: Minimize generation of dust. Carefully shovel or sweep up spilled material and place in suitable container. This material and its container must be disposed of in a safe way, and as per local legislation. Notify authorities if product enters sewers or public waters.

Other information: This material and its container must be disposed of as hazardous waste.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection". For disposal of solid materials or residues refer to section 13: "Disposal considerations".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling: Ensure good ventilation of the work station. Do not handle until all safety precautions have been read and understood. Wear personal protective equipment. Avoid contact with skin and eyes. Do not breathe dust, fume.

Hygiene measures: Always wash hands after handling the product. Do not eat, drink or smoke when using this product. 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: Ensure adequate ventilation, especially in confined areas.

Storage conditions: Store locked up. Store in a well-ventilated place. Keep cool.

Incompatible materials: Acetylene, ammonia, ammonium nitrate, aqua regia, dioxane, ethylene oxide, chlorine trifluoride, halogens, hydrogen peroxide, hydrazine, hydrazine, mononitrate, hydrazoic acid, hydroxylamine, hydrogen sulfide, performic acid, phosphorus, selenium, sulfur, titanium plus potassium chlorate. Bromates, chorates and iodates of alkali and alkali earth metals.

Storage area: Store in a well-ventilated place.

Packaging materials: Keep only in original container.

7.3. Specific end use(s)

Other hot work operations with metals.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| Silver (7440-22-4) |
|-------------------|------------------|-----------------|
| EU                | Local name       | Silver, metallic|
| EU                | IOELV TWA (mg/m³)| 0.1 mg/m³       |

8.2. Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Silver Braze 85Ni15
Safety Data Sheet
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1/6/2017 EN (English) 4/7

Materials for protective clothing
Hand protection
Eye protection
Skin and body protection
Respiratory protection
Hand protection
Eye protection
Skin and body protection
Respiratory protection

Environmental exposure controls
Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| Physical state | Solid |
| Appearance     | Silver-grey. Metallic powder. |
| Colour         | Silver. |
| Odour          | Odourless. |
| Odour threshold| No data available |
| pH             | No data available |
| Relative evaporation rate (butylacetate=1) | No data available |
| Melting point  | No data available |
| Freezing point | Not applicable |
| Boiling point  | No data available |
| Flash point    | Not applicable |
| Auto-ignition temperature | Not applicable |
| Decomposition temperature | No data available |
| Flammability (solid, gas) | Non flammable |
| Vapour pressure| No data available |
| Relative vapour density at 20 °C | No data available |
| Relative density | Not applicable |
| Solubility     | Insoluble in water. |
| Log Pow        | No data available |
| Viscosity, kinematic | Not applicable |
| Viscosity, dynamic | No data available |
| Explosive properties | Product is not explosive. |
| Oxidising properties | Oxidising solids Not applicable. |
| Explosive limits | Not applicable |

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
Acetylene, ammonia, ammonium nitrate, aqua regia, dioxane, ethylene oxide, chlorine trifluoride, halogens, hydrogen peroxide, hydrazine, hydrazine, mononitrate, hydrazoic acid, hydroxylamine, hydrogen sulfide, performic acid, phosphorus, selenium, sulfur, titanium plus potassium chlorate. Bromates, chlorates and iodates of alkali and alkali earth metals.
10.6. Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

| Acute toxicity | Not classified (Based on available data, the classification criteria are not met) |
| Skin corrosion/irritation | Not classified (Based on available data, the classification criteria are not met) |
| Additional information | Contact dermatitis may result from direct exposure to the skin. |
| Serious eye damage/irritation | Not classified (Based on available data, the classification criteria are not met) |
| Respiratory or skin sensitisation | May cause an allergic skin reaction. |
| Additional information | Long-term exposure to brazing fume, gasses, or dust may contribute to pulmonary irritation or pneumoconiosis. |
| Germ cell mutagenicity | Not classified (Based on available data, the classification criteria are not met) |
| Carcinogenicity | Suspected of causing cancer (if inhaled). |
| Reproductive toxicity | Not classified (Based on available data, the classification criteria are not met) |
| Specific target organ toxicity (single exposure) | Not classified (Based on available data, the classification criteria are not met) |
| Specific target organ toxicity (repeated exposure) | Causes damage to organs through prolonged or repeated exposure. |
| Aspiration hazard | Not classified (Based on available data, the classification criteria are not met) |
| Potential adverse human health effects and symptoms | May cause cancer. |
| IARC group | 2B |
| Other information | Likely routes of exposure: inhalation. |

SECTION 12: Ecological information

12.1. Toxicity

| Ecology - general | Very toxic to aquatic life with long lasting effects. |
| Ecology - water | Very toxic to aquatic life with long lasting effects. |

12.2. Persistence and degradability

| Silver Braze 85Ni15 | Persistence and degradability | The product is not biodegradable. |

12.3. Bioaccumulative potential

| Silver Braze 85Ni15 | Bioaccumulative potential | Not established. |

12.4. Mobility in soil

| Silver Braze 85Ni15 | Ecology - soil | Not established. |

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

| Other adverse effects | None known. |
| Additional information | Avoid release to the environment |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| Regional legislation (waste) | Disposal must be done according to official regulations. |
| Waste treatment methods | Dispose of contents/container in accordance with licensed collector’s sorting instructions. |
| Waste disposal recommendations | Avoid release to the environment. Discharging into rivers and drains is forbidden. Dispose of contents/container to a hazardous or special waste collection point. |

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

| UN-No. (ADR) | Not applicable |
Silver Braze 85Ni15
Safety Data Sheet
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| UN-No. (IMDG) | Not applicable |
| UN-No. (IATA) | Not applicable |
| UN-No. (ADN) | Not applicable |
| UN-No. (RID) | Not applicable |

14.2. UN proper shipping name
Proper Shipping Name (ADR) | Not applicable |
Proper Shipping Name (IMDG) | Not applicable |
Proper Shipping Name (IATA) | Not applicable |
Proper Shipping Name (ADN) | Not applicable |
Proper Shipping Name (RID) | Not applicable |

14.3. Transport hazard class(es)
ADR
Transport hazard class(es) (ADR) | Not applicable |
IMDG
Transport hazard class(es) (IMDG) | Not applicable |
IATA
Transport hazard class(es) (IATA) | Not applicable |
ADN
Transport hazard class(es) (ADN) | Not applicable |
RID
Transport hazard class(es) (RID) | Not applicable |

14.4. Packing group
Packing group (ADR) | Not applicable |
Packing group (IMDG) | Not applicable |
Packing group (IATA) | Not applicable |
Packing group (ADN) | Not applicable |
Packing group (RID) | Not applicable |

14.5. Environmental hazards
Dangerous for the environment | No |
Marine pollutant | No |
Other information | No supplementary information available |

14.6. Special precautions for user
- Overland transport
  Not applicable |
- Transport by sea
  Not applicable |
- Air transport
  Not applicable |
- Inland waterway transport
  Not applicable |
- Rail transport
  Not applicable |

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code
Not applicable

SECTION 15: Regulatory information
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
15.1.1. EU-Regulations
Contains no substance on the REACH candidate list
15.1.2. National regulations
Seveso directive 96/82/EC

15.2. Chemical safety assessment
No chemical safety assessment has been carried out

SECTION 16: Other information

<table>
<thead>
<tr>
<th>H- and EUH-statements</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carc. 2</td>
<td>Carcinogenicity, Category 2</td>
</tr>
<tr>
<td>Skin Sens. 1</td>
<td>Sensitisation — Skin, Category 1</td>
</tr>
<tr>
<td>STOT RE 1</td>
<td>Specific target organ toxicity — Repeated exposure, Category 1</td>
</tr>
<tr>
<td>H317</td>
<td>May cause an allergic skin reaction</td>
</tr>
<tr>
<td>H351</td>
<td>Suspected of causing cancer</td>
</tr>
<tr>
<td>H372</td>
<td>Causes damage to organs through prolonged or repeated exposure</td>
</tr>
</tbody>
</table>

SDS EU (REACH Annex II)

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 therefore be construed as guaranteeing any specific property of the product.