MATERIAL SAFETY DATA SHEET

1 - PRODUCT AND COMPANY IDENTIFICATION

Company Name:
DENTAL DEVICES AND SUPPLIES LTD.
15 GREAT CENTRAL ROAD
LOUGHBOROUGH
LEICS LE11 1RW
UNITED KINGDOM
Emergency Phone: +44 (0)1509-220490
Information Phone: +44 (0)1509-220490

Product Name: Titanium Alloy Dental Wires

2 – COMPOSITION / INGREDIENT

Metallic alloys, in wire form containing:
Titanium CAS No. 7440-32-6
Nickel CAS No. 7440-02-0
Copper CAS No. 7440-50-8

<table>
<thead>
<tr>
<th>Description &amp; Part Numbers</th>
<th>Composition (%)</th>
<th>Hazardous</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ti</td>
<td>Ni</td>
</tr>
<tr>
<td>Ni/Ti-SE Wires – P/N 200-xxx1 thru xxx9</td>
<td>55</td>
<td>45</td>
</tr>
<tr>
<td>Ni/Ti-HS Wires – P/N 300-xxx1 thru xxx9</td>
<td>55</td>
<td>45</td>
</tr>
<tr>
<td>Cu/Ni/Ti Wires – P/N 400-xxx1 thru xxx9</td>
<td>52</td>
<td>48</td>
</tr>
</tbody>
</table>

3 – HAZARDOUS COMPONENTS

Nickel is classified as a suspect carcinogen (category 3) and alloys that contain more than 1% of this element is classified in the same way. Nickel is also classified as a skin sensitizer.
USA: SARA Section 313 Supplier Notification: Emergency Planning and Community Right-To Know Act of 1986 and of 40 CFR 372

The Hazcom Identification System Ratings
Health Rating: 0
Flammability Rating: 0
Reactivity Rating: 0
Contact Rating: 1
Lab. Protective Equipment: GOGGLES OR SHIELDS, PROPER GLOVES.

Potential Health Effects
Inhalation: N/A
Ingestion: N/A
Skin Contact: May cause sensitization if person is allergic to nickel
Eye Contact: N/A
Chronic Exposure: N/A

4 – FIRST AID MEASURES

**Inhalation:** Non Volatile  
**Ingestion:** If symptoms of ingestion arise, seek medical help.  
**Skin Contact:** If a rash develops, seek medical attention.  
**Eye Contact:** N/A

5 - FIRE FIGHTING MEASURES

**Fire:** Non flammable - Not considered to be a fire hazard.  
**Explosion:** Not considered to be an explosion hazard.  
**Fire Extinguishing Media:** Water, CO₂ foam, or other suitable media for the surrounding fire.

6 – ACCIDENTAL RELEASE MEASURES

Not Applicable

7 – HANDLING & STORAGE

No special handling and storage conditions are required.

8 – EXPOSURE CONTROL / PERSONAL PROTECTION

**Inhalation:** Non volatile, if used correctly.  
**Hands:** Use waterproof gloves.  
**Eyes:** Use protective glasses or goggles.  
**Skin Protection:** Wear protective gloves and clean body-covering clothing.  
**Airborne Exposure Limits:**  
OSHA Permissible Exposure Limit (PEL): 1.0 mg / m³ for nickel  
ACGIH Threshold Limit Value (TLV): 1.0 mg / m³ for nickel  
**Ventilation Systems:**  
Not applicable

9 – PHYSICAL & CHEMICAL DATA

**Appearance and Colour:** fine wire / metallic or bluish brown colour.  
**Odour:** Odourless  
**Solubility:** Non soluble under normal conditions  
**PH:** N/A  
**Boiling Point:** N/A  
**Melting Point:** N/A  
**Fire Hazard:** Not considered a fire hazard.  
**Flash Point:** No information found  
**Specific Gravity:** 6.5 g/cc  
**Vapour Pressure:** No information found
10 – STABILITY & REACTIVITY

**Stability:** Stable under ordinary conditions of use and storage.
**Hazardous Decomposition Products:** Stable under normal conditions.
**Hazardous Polymerization:** N/A
**Incompatible Substances:** Acids, carbon monoxide.
**Conditions to Avoid:** Exposure to acids and incompatible substances.

11 – TOXICOLOGICAL INFORMATION

Nickel is classified as a category 3 carcinogen. The exposure route of concern is inhalation. In wire form, these alloys are non-toxic, but may cause allergic reaction to individuals with nickel sensitivity.

12 – ECOLOGICAL INFORMATION

Non-soluble in water and very slow reaction to environmental conditions. No special precautions are necessary.

13 – DISPOSAL CONSIDERATION

Dispose in accordance with the Federal, State and local disposal regulations. Dispose containers and unused contents in accordance with Federal, State and local requirements.

14 – TRANSPORT INFORMATION

No special precautions are necessary.

15 – REGULATORY INFORMATION

Not required to be labelled as hazardous materials.

16 – OTHER INFORMATION

All information, recommendations, and suggestions appearing herein concerning the product are based upon data believed to be reliable. It is the user's responsibility to determine the safety, toxicity, and suitability for their own use of the product described herein. Since the actual use by others is beyond our control, no guarantee expressed or implied is made by DDS as to the effects of such use, the results to be obtained, or the safety and toxicity of the product, nor does DDS assume any liability arising out of use by others of the product referred to herein. DDS shall not in any event be liable for special, incidental or consequential damages in connection with this MSDS. This MSDS is not intended as a license to operate under, or recommendation to infringe on, any patents. Appropriate warnings and safe handling procedures should be provided to handlers and users.

This information is not intended to serve as a complete regulatory compliance document. This information is offered as a guide to the MSDS user. No guarantees can be made whether the user will be in complete or correct compliance with all applicable regulations when this MSDS is used. It is the user's responsibility to comply with all federal, state, and local regulations.