Section 1: Identification

1.1 Product Identifier: Retanium

1.2 Manufacturer: Reliance Orthodontic Products Inc. 1540 West Thorndale Ave, Itasca, IL 60143 USA

1.3 Emergency Number: 630-773-4009

1.4 Recommended Use: Single strand flat titanium wire used for lingual splinting

Section 2: Hazard(s) Identification

2.1 Titanium is generally not considered hazardous in the form shipped (solid bars, billets wire, etc.), however, if your process involves grinding, melting, welding, cutting, or any other process that causes a release of dust or fume, hazardous levels of dust or fume of the constituents of these alloys could be generated. When used as intended titanium may not be carcinogenic.
The following is a list of potential health effects for all hazardous elements that are possibly contained in our alloys.

2.2 Titanium fumes are respiratory irritants and may cause respiratory disease, skin contact can also cause an allergic skin rash, nickel and its compounds have been reported to cause cancer of the lungs and sinuses.

2.3 GHS-US Labeling: No Labeling applicable

Section 3: Composition /Information on Ingredients

3.1 Substances:

Composition	%	CAS#	OSHA PEL#	ACGIH TLV
Aluminum (as dust) (as fume)	0-8	7429-90-05	15 5	10 5
Carbon	0-0.01	1333-86-4	3.5	3.5
Chromium	0-11	7440-47-3	1	1
Columbium/Niobium	0-45	7440-03-01	None	None
Copper (as dust) (as fume)	0-0.2	7440-50-08	1 0.1	1 0.2
Iron (oxide as fume)	0-0.42	7309-37-1	10	5
Molybdenum (total dust)	0-12	7439-98-7	15	10
Tantalum (metal & oxide dust)	0-1	7440-25-7	5	5
Tin (inorganic compounds) (organic compounds)	0-3	7440-31-5	2 0.1	2
Titanium (total dust)	0-5	13463-67-7	15	10
Vanadium (as dust) (as fume)	0-5.15	1314-62-1	0.5 0.1	0.05 0.05
Zirconium	0-4	7440-67-7	5	5

Various combinations of the above components may appear in grades supplied. More specific information on a particular grade may be obtained.

Section 4: First-Aid Measures

4.1 Necessary first-aid instructions by relevant routes of exposure (inhalation, skin and eye contact, and ingestion for the raw material processes).

4.2 Inhalation: Move person to fresh air until recovered. Consult a physician.
4.3 Skin Contact: Wash with water and mild detergent.
4.4 Eye Contact: Flush thoroughly with water, consult a physician.
4.5 Ingestion: While ingestion of large enough quantities to cause health effects is unlikely. Consult a physician if it occurs.

Section 5: Fire-Fighting Measures

5.1 This section provides recommendations for fighting a fire caused by the chemical. The required information consists of:
5.2 Suitable Extinguishing Media: Normal fire-fighting procedures
5.3 Unsuitable Extinguishing Media: N/A
5.4 Particular Hazards: NA
5.5 Protective Equipment for Fire-Fighters: N/A

Section 6: Accidental Release Measures
6.1 The required information may consist of recommendations for: 6.2 Titanium is not a chemical and will not spill.
Section 7: Handling and Storage
7.1 The required information consists of: 7.2 Titanium is not a chemical and does not require special handling or storage.
Section 8: Exposure Controls/Personal Protection
8.1 The required information consists of: 8.2 Titanium is not a chemical and does not require exposure controls or PPE.
Section 9: Physical and Chemical Properties
9.1 The minimum required information consists of: 9.2 Appearance (physical state, color, etc.); Solid Wire 9.3 Upper/lower flammability or explosive limits; No data available 9.4 Odor; No data available 9.5 Vapor pressure; No data available 9.6 Odor threshold; No data available 9.7 Vapor density; No data available 9.8 pH; No data available 9.9 Relative density; No data available 9.10 Melting point/freezing point; No data available 9.11 Solubility(ies); No data available 9.12 Initial boiling point and boiling range; No data available 9.13 Flash point; No data available 9.14 Evaporation rate; No data available 9.15 Flammability (solid, gas); No data available 9.16 Partition coefficient: n-octanol/water; No data available 9.17 Auto-ignition temperature; No data available 9.18 Decomposition temperature; No data available 9.19 Viscosity. No data available

Section 10: Stability and Reactivity
10.1 The required information consists of: 10.2 Reactivity: Titanium is not a chemical and is stable 10.3 Chemical stability: Titanium is not a chemical and is stable 10.3 Other: Titanium is not a chemical and is not reactive
Section 11: Toxicological Information
11.1 The required information consists of: 11.2 Information on the likely routes of exposure: Retanium is used in the oral cavity. 11.3 Description of the delayed, immediate, or chronic effects from short- and long-term exposure: Slight to severe dermatitis to anaphylactic shock. 11.4 The numerical measures of toxicity: Unknown 11.5 Description of the symptoms: Skin rash or allergic reaction that requires immediate medical attention. Titanium, during their processing stages may be a potential carcinogen, Titanium is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest editions) or found to be a potential carcinogen by OSHA
Section 12: Ecological Information
12.1 The information may include: 12.2 Titanium is not a chemical and will not affect the environment.
Section 13: Disposal Consideration
13.1 The information may include: 13.2 Titanium can be recycled or disposed per local, regional, and international regulations.
Section 14: Transport Information
14.1 The information may include: 14.2 Titanium is solid and not a hazard for transportation by road, air, rail or sea.

Section 15: Regulatory Information
15.1 The information may include safety, health, and environmental regulations 15.2 A certain population is allergic to titanium when used in orthodontic applications.
Section 16: Other Information
16.1 The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. Therefore, it should not be construed as guaranteeing specific properties.