

SAFETY DATA SHEET

PRODUCT AND COMPANY IDENTIFICATION

Product name : Self-ligating Brackets mini
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HAZARDS IDENTIFICATION

GHS: N/A
Hazard: A metal allergy may occur depending on the individual's susceptibility.

COMPOSITION / INFORMATION ON INGREDIENTS

| Components | wt % | CAS No. | OSHA PEL mg/m ³ | ACGIH TLV mg/m ³ |
|---------------------------------------|---------|-----------|--|---|
| Bracket body & Hook / Post | | | | |
| Manganese | 0 ~ 5 | 7439-96-5 | 5 mg/m ³ TWA | 0.2 mg/m ³ TWA (respirable fraction) 0.1 mg/m ³ TWA (inhalable fraction) |
| Nickel | 5 ~ 15 | 7440-02-0 | 1 mg/m ³ TWA | 1.5 mg/m ³ TWA (inhalable fraction) |
| Chromium | 10 ~ 20 | 7440-47-3 | 0.5 mg/m ³ TWA | 0.5 mg/m ³ TWA |
| Copper | 0 ~ 10 | 7440-50-8 | 10 mg/m ³ TWA (dust & mist) 0.1 mg/m ³ TWA (fume) | 10 mg/m ³ TWA (dust & mist) 0.2 mg/m ³ TWA (fume) |
| Niobium | 0 ~ 5 | 7440-03-1 | N/A | N/A |
| Iron | Bal. | 7439-89-6 | 10 mg/m ³ TWA (as fume of Iron oxide) | 5 mg/m ³ TWA (as respirable fraction of Iron oxide) |
| Clip | | | | |
| Manganese | 0 ~ 5 | 7439-96-5 | 5 mg/m ³ TWA | 0.2 mg/m ³ TWA (respirable fraction) 0.1 mg/m ³ TWA (inhalable fraction) |
| Nickel | 20 ~ 50 | 7440-02-0 | 1 mg/m ³ TWA | 1.5 mg/m ³ TWA (inhalable fraction) |
| Chromium | 10 ~ 30 | 7440-47-3 | 0.5 mg/m ³ TWA | 0.5 mg/m ³ TWA |
| Molybdenum | 5 ~ 20 | 7439-98-7 | 15 mg/m ³ TWA (total dust) | 10 mg/m ³ TWA (inhalable fraction) 3 mg/m ³ TWA (respirable fraction) |
| Niobium | 0 ~ 5 | 7440-03-1 | N/A | N/A |
| Titanium | 0 ~ 5 | 7440-32-6 | 15 mg/m ³ TWA (total dust of Titanium dioxide) | 10 mg/m ³ TWA (total dust of Titanium dioxide) |
| Iron | 0 ~ 5 | 7439-89-6 | 10 mg/m ³ TWA (as fume of Iron oxide) | 5 mg/m ³ TWA (as respirable fraction of Iron oxide) |
| Cobalt | Bal. | 7440-48-4 | 0.1 mg/m ³ TWA (dust and fume) | 0.02 mg/m ³ TWA (dust and fume) |
| Bonding base | | | | |
| Manganese | 0 ~ 5 | 7439-96-5 | 5 mg/m ³ TWA | 0.2 mg/m ³ TWA (respirable fraction) 0.1 mg/m ³ TWA (inhalable fraction) |
| Nickel | 5 ~ 15 | 7440-02-0 | 1 mg/m ³ TWA | 1.5 mg/m ³ TWA (inhalable fraction) |
| Chromium | 10 ~ 20 | 7440-47-3 | 0.5 mg/m ³ TWA | 0.5 mg/m ³ TWA |
| Molybdenum | 0 ~ 5 | 7439-98-7 | 15 mg/m ³ TWA (total dust) | 10 mg/m ³ TWA (inhalable fraction) 3 mg/m ³ TWA (respirable fraction) |
| Iron | Bal. | 7439-89-6 | 10 mg/m ³ TWA (as fume of Iron oxide) | 5 mg/m ³ TWA (as respirable fraction of Iron oxide) |

| Components | wt % | CAS No. | OSHA PEL mg/m ³ | ACGIH TLV mg/m ³ |
|----------------|---------|-----------|---|---|
| Coating | | | | |
| Gold | 0 ~ 100 | 7440-57-5 | N/A | N/A |
| Rhodium | 0 ~ 100 | 7440-16-6 | 0.1 mg/m ³ TWA (as metal fume) | 1 mg/m ³ TWA (as metal fume) |

4. FIRST-AID MEASURES

Eye contact: Flush with large quantities of water, holding the eyelids apart to assure that the material is washed out. Get medical attention if irritation persists.

Inhalation: If irritation or other symptoms develop, remove to fresh air. Get medical attention if symptoms persist.

Ingestion: When swallowed this product, seek immediate medical attention.

Skin contact: This product should not be used for patients with an identified allergy to nickel and/or other metals and seek immediate medical attention if symptoms persist.

5. FIRE-FIGHTING MEASURES

This product is nonflammable, but packaging material for this product is combustible.

Extinguishing Media: N/A

Protection and firefighting procedures: All personnel engaged in firefighting must use appropriate protective equipment.

6. ACCIDENTAL RELEASE MEASURES

N/A

7. HANDLING AND STORAGE

Handling: N/A

Storage: Store this product with identification not to mix the other products, and keep away from dust and moisture.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ventilation: Adequate ventilation practice

Protective equipment commonly used:

Eye protection: Safety glasses, safety goggles

Hand protection: Protective gloves (made of rubber, vinyl, polyethylene and so on)

Respiratory protection: Dust respirator (in case of dust occurrence)

9. PHYSICAL AND CHEMICAL PROPERTIES

Normal physical state: Solid

Color: White silver

Odor: Odorless

Density: N/A

Melting point: N/A

Solubility in water: Insoluble

10. STABILITY AND REACTIVITY

- Stability:** This product is considered a stable material under normal storage and handling conditions.
- Condition to avoid:** N/A
- Materials to avoid:** N/A
- Hazardous products produced during decomposition:**
None known.

11. TOXICOLOGICAL INFORMATION

N/A

12. ECOLOGICAL INFORMATION

N/A

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

- Road transportation:** Not classified.
- Sea transportation:** Not classified.
- Air transportation:** Not classified.

15. REGULATORY INFORMATION

N/A

16. OTHER INFORMATION

This SDS was prepared in accordance with the requirements of ISO 11014 and to be used only for this product. The information contained in the SDS is believed to be valid and accurate. However, Tomy Inc. makes no warranty, either expressed or implied, as to the completeness of information in all possible condition.