



Bases (316L)

1 - IDENTIFICATION

PRODUCT NAME: Stainless Steel Foil-Mesh
CHEMICAL FAMILY: Metals
CHEMICAL NAME:
FORMULA: Woven wire mesh and metal foil laminate
COMPANY NAME:
Orthodontic Design and Production
1370 Decision Street, Suite D
Vista, CA 92081 (760) 734-3995

2 - HAZARDOUS INGREDIENTS

Table with 2 columns: Element Name and Limit. Includes Carbon (C), Chromium (Cr), Iron (Fe), Manganese (Mn), Molybdenum (Mo), Nickel (Ni), Phosphorus (P), Silicon (Si), and Sulfur (S).

Exposure limits for the above elements, listed below in milligrams per cubic meter, are typically given for the respective elements in pure form, or in chemical compounds. Therefore such exposure limits may not necessarily be applicable to stainless steel products in allow form. (NOTE: "N/L" indicates that exposure limits for the element are not listed in the applicable regulations.)

Table with 4 columns: ELEMENT, OSHA PEL, FORM LISTED, ACGIH TLV. Lists exposure limits for Carbon, Chromium, Iron, Manganese, Molybdenum, Nickel, Phosphorus, Silicon, and Sulfur.

MATERIAL SAFETY DATA SHEET

3 - HEALTH HAZARD DATA

Stainless steel foil mesh in its original state does not normally present health hazards by inhalation or contact. There is some medical evidence that certain individuals suffer allergic reactions such as contact dermatitis to nickel and its alloys. MKI has not seen sufficient evidence to indicate that foil mesh can pose any such hazard even to nickel-sensitive individuals. Ingestion is hazardous due to the potential for internal tissue damage; in the event of ingestion, seek medical attention immediately. Operations such as welding, burning and brazing may produce hazardous metal fumes, and therefore proper safety precautions are required. Operations such as sawing, grinding, stamping, milling, or machining may produce fine metal grit or dust that may pose respiratory risks.

Typical effects of acute overexposure to metallic dusts and fumes include irritation of the eyes, nose, and throat. In addition, exposure to high concentrations of iron oxide dusts, manganese, copper, zinc or lead fumes can result in "metal fume fever" with symptoms including metallic taste in the mouth, chills and fever, dryness and irritation in throat. Symptoms usually last 12 to 48 hours. (Metal fume fever is most serious in cases of lead, cadmium, and zinc fumes, none of which is present in stainless steel.) Chronic overexposure to inhalation of high concentrations of metal fumes or dust of the following elements may lead to the condition indicated:

- Cr or Ni: dermatitis, inflammation/ulceration of upper respiratory tract, possible cancer of nasal passages and lungs.
FE or its oxides: pulmonary effect, siderosis
Manganese: bronchitis, pneumonitis, loss of coordination
Molybdenum: pain in joints, hands, knees and feet; morphological changes in liver, kidneys and spleen; anemia, diarrhea, coma, deformity; necrosis of the mandible
Phosphorus: necrosis of mandible
Sulfur (as dioxide): edema of lungs

4 - PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Solid
PHYSICAL FORM: Solid
COLOR: Bright Silver
ODOR: no odor
SOLUBILITY IN WATER: insoluble
DENSITY: 0.29 lbs per cubic inch
MELTING POINT: 2520/2620 Degrees Fahrenheit

Note: This MSDS was prepared in accordance with the requirements of the OSHA Haard Communication Standard (29 CFR 1910.1200) and is to be used only for this product. The information contained in this MSDS is, to the best of our knowledge, believed to be accurate. CONTACT CHEMTREC (800) 424-3900 IN CASE OF EMERGENCY



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5 – FIRE AND EXPLOSION HAZARD DATA

Stainless steel products in solid state do not present fire or explosion hazard.

6 – REACTIVITY DATA

Not applicable

7 – EMERGENCY/FIRST AID MEASURES

In case of inhalation of airborne fumes and particulates, remove to fresh air, and get medical attention. In case of eye contact with metal dusts, flush immediately with running water, and get medical attention. In case of skin contact, if irritation develops, wash well with soap and water; if skin condition persists, get medical attention.

8 – HANDLING AND STORAGE

Not applicable.

9 – SPECIAL PROTECTION

RESPIRATORY: NIOSH approved respirators should be used to avoid excessive inhalation of fumes and particulates in any situation where such exposure might occur. Ventilation should be provided during welding, brazing, burning, sawing or grinding if fumes are likely to be released.

EYES: Safety glasses should be used when sawing, burning, welding, grinding or machining

Additional clothing and protective equipment may be needed depending on the operations being performed on the material. Gloves should be worn when handling the material due to the possibility of sharp edges.

10 – SPILL OR LEAK PROCEDURES

Not applicable

11 – DISPOSAL INFORMATION

Not applicable

12 – REGULATORY INFORMATION

Not applicable

MATERIAL SAFETY DATA SHEET

13 – DISCLAIMER OF WARRANTIES

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