



Safety Data Sheet

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Product Description

Mini stops

REF NUMBER

Restrictions to use:

For use only by dental professionals.

Manufacturer : International Orthodontic Services
Address : 12811 Capricorn St. Stafford, TX 77477 USA
Phone No, : 1888-10S-8882 (1888-461-8882)
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COMPOSITION/INFORMATION OF THE INGREDIENTS

Products in stainless steel type 302, 303, 303Cu, 304, 304L, 304V, 305, 316 and 316L
(AISI / SAE / ASTM / JIS / ABNT NBR) :
Cr: 16,0 – 20,0%
Ni: 8,0 – 13,0%
Mn: 2,0%
Mo: 2,5%
Cu: 2,5 – 4,0% (for 303Cu)

HAZARDS IDENTIFICATION

The term "hazards" and risk material, has been used with "MSDS" (Material Safety Data Sheet), and should be understood and defined according to "OSHA Hazard Communication Standard" (Occupational Safety and Health Act) (Document reference: 29 CFR Part 2920, 1200), PEL (Personal Exposure Limit), from USA. Observe the laws and directives in each country. At the documents attached, appendices, reference lists, etc. that are or could be incorporated, should be considered.

HAZARD MATERIALS

Element	CAS N°	OSHA (PEL)	TLV (ACGIH)	IARC (listado)
Cr	7440-47-3	1	0.5	No
Ni	7440-02-0	1.5	1	Yes
Mn	7439-96-5	5	0.1	No
Mo	7439-98-7	15	10	No
Cu	7440-50-8	1	0.1	No

NE: Not established.

CAS = Chemical Abstracts Service (USA). PEL = Permissible Exposure Limit in mg/m³.

TLV = Threshold Limit Value (ACGIH = American Conference of Governmental Industries Hygienists)

IARC = International Agency for Research on Cancer.

Nickel is listed on "National Toxicology Programs" from USA and on "Annual Report on Carcinogens", as well as on "International Agency for Research on Cancer (IARC)".

Monographs point it out as potentially carcinogenic.

However, recent epidemiological notes studied and published by IARC don't attach the increase rate disease associated to alloys metallic in use.

FIRST AID MEASURES

Powder inhalation: Remove the affected person to a place with fresh and ventilated air under normal conditions. See a physician immediately.

Eyes contact with powder: Wash the eyes with plenty water to remove the particles. See a physician immediately.

Skin contact with powder: Wash in current water to remove the excess and after this wash with water and soap. See a physician.

Ingestion: See a physician immediately.

The Directives 94/27CEE and 2004/96CEE alert that is possible an allergic reaction to the nickel. The sensibilization can be associated the rate of nickel liberation

FIRE-FIGHTING MEASURES

Firefighting measures should be taken especially when the material is subject to operations that make powder, sparks or excessive heat.

ACCIDENTAL RELEASE MEASURES

Not required.
Observe laws and directives in use in each country.

HANDLING AND STORAGE

HANDLING

The package form doesn't require any special care for handling or storage.
Should be observe some process for handling and operation: Ventilation requirements;
General recommendation: keep the maximum concentration alloyed
for powder and smokes in the air in accordance with "ACGIH RLVS" or laws and directives more actual in each country.
Local work requirements: ventilated areas for abrasives operations or that can make smokes.
Obs.: ACGIH = American Conference of Governmental Industrial hygienists.
Observe the laws and directives in use in each country.

STORAGE

Keep on the original package.
The material is supply in non-sterile form.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Long and repetitive exposures to smokes generated during heat operations, cut, abrasion or welding shouldn't make problems if observed the limits for the "OSHA" e "PEL" values.
The nickel is listed on "National Toxicology Programs" of the USA, and the "Annual Report on Carcinogens", as in the "International Agency for Research on Cancer (IRAC)".
Monograph point as been potentially carcinogenic.
However, recent publish notes of epidemiological studies doesn't make a parallel with the increase of this disease with the use of worked metallic alloys.

The use of Individual Protection Equipment is required for:
Sanding operation that make sparks or smokes, in this case use the security glass and gloves e the air exhauster.
The risk values "S" for nickel are:
- S22: don't breath the powder
- S36: during the work use the protection and security equipment.

PHYSICAL AND CHEMICAL PROPERTIES

Solid material.
Usual metallic color and shine.
Can present iron magnetism because of the martensite in the microstructure.
Density = 7,7 – 8,1 g/cm³.
React with some inorganic acid moisture origin smokes that are prejudicial for health.

STABILITY AND REACTIVITY

Stable material in the supply conditions.

TOXICOLOGICAL INFORMATION

Powder exposition symptoms, smokes of gases and solder.

Short period exposition: metallic flavor, nausea, chest compression, fever, eye irritation, nose, throat, lose conscience/death of the gases beyond the welding or oxygen care.

Use Individual or Collective Protection Equipment.

Long period exposition: doesn't have any collateral effects when the product is used in his solid form.

Based in studies realized until now, it can be sure about the exposition of the operators in the nickel alloy; it can increase in the incidence of pulmonary cancer and others diseases.

ECOLOGICAL INFORMATION

Thin material (granulated) should be evacuated; avoid the use of air compressors.

Observe the laws and directives.

DISPOSAL CONSIDERATIONS

The elimination doesn't apply in known hazards.

Observe the laws and directives in each country.

TRANSPORT INFORMATION

Keep in the original package.

Don't use the product if the package has been unpackaged.

Observe the laws and directive in each country.

REGULATORY INFORMATION

Attempt to good work practices.

Material intended for use by qualified professionals.

OTHER INFORMATION

The document's information is based on the knowledge obtained until the present date and it is intended to a description of the product regarding its safety measures.

This description does not ensure the products properties or characteristics.

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