



healthmark  
INDUSTRIES CO.  
health care products

800-521-6224  
www.hmark.com

## Product SDS

Reference date: 9/11/09 Revision date:  
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### 01. Identification of the substance/mixture and of the company

Product name: Cleaning brushes, tube brushes (stainless steel wire)

Code number(s): 24-1-010, 24-1-015, 24-1-030, 24-1-035, 24-1-040, 24-1-041, 24-1-050, 24-1-055, 24-1-060, 3770, 4041, 4042, 52003-21, 52003-21/S, 52003-23, 52003-25, 52003-27, 52003-35, TR03020, TR150221, TR150483, TR160617, TR350109, TR350232, TR350233, TR350233-TBS, TR350354, TR350429, TR360231

Purpose of product: Used to clean cannulated instruments. All brushes are made of nylon bristles imbedded in twisted stainless-steel wire.

Manufacturer/supplier: Healthmark Industries Co.

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Telephone/Fax/Email: (800) 521-6224 / (586) 491-2113 / healthmark@hmark.com

Emergency telephone number: (800) 424-9300 (24-hour service)

### 02. Hazards identifications

Classification of the substance or mixture: Stainless steel

Adverse environmental and human health effects: Products under normal conditions do not represent an inhalation, ingestion, or contact health hazard.

Short term exposure to fumes/dust may produce irritation of eyes and respiratory system. Inhalation of high concentrations of freshly formed oxide fumes or iron, manganese, and copper may cause metal fume fever characterized by metallic taste in the mouth, dryness and irritation of the throat, and influenza-like symptoms.

Chronic inhalation of high concentrations of iron oxide fumes or dust may lead to a benign pneumoconiosis (siderosis). Inhalation of high concentrations of ferric oxide may possibly enhance the risk of lung cancer development in workers exposed to pulmonary carcinogens.

Chromium and nickel and their compounds are listed in the 3<sup>rd</sup> Annual Report on carcinogens, as prepared by the National Toxicology Program (NTP). Exposure to high concentrations of dust and fumes can cause sensitization dermatitis, inflammation and/or ulceration of upper respiratory tract and possibly cancer of nasal passages and lungs.

Recent epidemiological studies are workers melting and working alloys contained nickel/chromium have found no increased risk of cancer.

### 03. Composition/information on ingredients

Description of the mixture: Stainless steel (base metal, alloying elements, and metallic coatings)

<b>Base metal</b>	<b>% Composition by weight</b>	<b>ACGIH TLV (mg/m<sup>3</sup>)</b>
Iron (Fe)	60-88	5 (as iron oxide)
<b>Alloying elements</b>		
Chromium (Cr)	10-30	0.5
Nickel (Ni)	0-27	1
Manganese (Mn)	<6	5 (as dust-ceiling)
Molybdenum (Mo)	<6	10 (insoluble compound)
Copper (Cu)	<6	1 (dust and mist)
Titanium (Ti)	<6	10 (total dust)
Carbon (C)	<2	None established
Phosphorus (P)	<2	None established
Sulfur (S)	<2	5 (as SO <sub>2</sub> )
Silicon (Si)	<2	10 (total dust)
Cobalt (Co)	<2	0.1 (dust and fume)
Niobium (Nb)	<2	None established
Nitrogen (N)	<2	6 (as NO <sub>2</sub> )
Tin (Sn)	<2	2

Hazardous ingredients: See above

#### 04. First aid measures

General information: N/A

Following inhalation: If exposed to excessive levels of metal fumes, remove to fresh air and seek medical aid immediately.

Following skin contact: N/A

Following eye contact: Flush with water for at least 15 minutes.

Following ingestion: N/A

Notes for the doctor: N/A

#### 05. Firefighting measures

Suitable extinguishing media: N/A

Unsuitable extinguishing media: N/A

Special hazards arising from the substance and combustion products: Steel products in the solid state present no fire or explosion hazard.

Advice for firefighters: N/A

#### 06. Accidental release measures

General information: N/A

Environmental precautions: N/A

Additional information: N/A

## 07. Handling and storage

Precautions for safe handling: In welding, precautions should be taken for airborne contaminants which may originate from components of the welding rod. Arc or spark generated when welding or burning could be a source of ignition for combustible and flammable materials.

Fire Preventions: N/A

Technical measures and storage conditions: N/A

## 08. Exposure controls/personal protection

Control parameters: Local exhaust ventilation should be utilized when welding, burning, sawing, brazing, grinding, or machining when exposure exceed TLVs.

Personal protective equipment: Other protective equipment should be utilized as required by welding standards.

Hand protection: N/A

Respiratory protection: NIOSH/MSHA approved dust and fume respirator should be used to avoid excessive inhalation of particulates when exposures exceed TLVs.

Eye protection: Safety glasses or goggles should be utilized as required by exposure.

Advice on general occupational hygiene: N/A

Environmental exposure controls: n/a

## 09. Physical and chemical properties

Appearance: Stainless steel twisted wire

Physical state: Solid

Color: Gray-black

Odor: Odorless

Safety relevant basic data: N/A

Explosion hazard: N/A

Density: N/A

pH: N/A

Initial boiling point/range: °C /°F N/A

Solubility: N/A

Flash point: °C /°F N/A

Ignition temperature: °C /°F N/A

Melting point: >2500 °F

Conditions to avoid: N/A

Incompatible materials: Reacts with strong acids to produce hydrogen gas.

## 10. Stability and reactivity

Conditions to avoid: N/A

Incompatible materials: Reacts with strong acids to produce hydrogen gas.

Hazardous decomposition products: Metallic dust or fumes may be produced during welding, burning, grindings, and possibly machining.

## 11. Toxicological information

Information on toxicological effects: Please refer to Section 02.

Irritation: N/A

Sensitization: N/A

Inhalation: N/A

Practical experiences: N/A

Ingredient: N/A

## 12. Ecological information

Terrestrial toxicity: N/A

Aquatic toxicity: N/A

Mobility: N/A

Persistence and degradability: N/A

Bio accumulative potential: N/A

Results of PBT and vPvB assessment: N/A

Other adverse effects: N/A

## 13. Disposal considerations

Product: Please refer to applicable local, state, and federal regulations.

Contaminated packaging: N/A

Uncontaminated packaging: N/A

## 14. Transport information

UN-No: N/A

Proper shipping name: N/A  
Classification code: N/A

Packing group: N/A

Hazard label: N/A

## 15. Regulatory information

Material safety evaluation: N/A

Regulation on combustible liquids: N/A

Class according 2009/104/EG (BetrSichV): N/A

Water hazard class: N/A

Storage according TRGS 510 (Storage of hazardous substances in non-stationary containers): N/A

## 16. Other information

Recommended application: N/A

Relevant R-, H-, and EUH-phrases: N/A

The information supplied in this Safety Data Sheet is designed only as a guidance for the safe use, storage, and handling of the product. This information is correct to the best of our knowledge and beliefs at the date of the publication however no guarantee is made to its accuracy. This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any other processes.