

1. IDENTIFICATION

Product Identity / Trade Name: Stainless Steel Wire Brushes

Product Use: Abrasive materials used on metals, concrete, masonry and building materials.

Manufacturer: United Abrasives, Inc. 185 Boston Post Road North Windham, CT 06256

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2. HAZARD(S) IDENTIFICATION

Classification: This product is classified as a manufactured article. The use of this product will not result in exposure to hazardous substances under normal conditions of use based on test data.

Hazards not otherwise classified: The exposure to the dust/fumes from the material being brushed and the potential hazard from this exposure must be evaluated

Label Elements:

None required.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures:

| Chemical name | CAS No. | Concentration |
|---------------|-----------|---------------|
| Iron | 7439-89-6 | <90 |
| Nickel | 7440-02-0 | <38 |
| Chromium | 7440-47-3 | 10-30 |
| Manganese | 7439-96-5 | <15 |
| Molybdenum | 7439-98-7 | <8 |
| Silicon | 7440-21-3 | <5 |

Other elements may be present, such as Cu, Ti. These are not classified as hazardous, or are below the concentration levels for classification of these alloys as hazardous

The specific identity and/or exact percentage has been withheld as a trade secret.

4. FIRST-AID MEASURES

Under normal handling and use, exposure to solid forms of this material present few health hazards. Subsequent operations such as grinding, melting or welding may produce potentially hazardous dust or fumes which can be inhaled or come in contact with the skin or eyes.

Ingestion: If dust is swallowed, seek medical attention.

Inhalation: Inhalation of excessive fume or dust concentrations may result in respiratory tract irritation. Move person to fresh air until recovered.

Eye Contact: Flush eyes thoroughly with water, holding open eyelids. Get medical attention if irritation occurs and persists.

Skin Contact: Wash dust from skin with soap and water. Launder contaminated clothing before reuse.

Most important symptoms/effects, acute and delayed: Use may generate dust that may cause eye and respiratory tract irritation. Dust may be harmful by inhalation and ingestion.

Indication of immediate medical attention and special treatment, if necessary: None known.

5. FIRE-FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media: Use any media that is appropriate for the surrounding fire.

Specific hazards arising from the chemical: This product is not combustible, however, consideration must be given to the potential fire/explosion hazards from the base material being processed. Many materials create flammable/explosive dusts or turnings when brushed, machined or ground.

Special protective equipment and precautions for fire-fighters: Full face, self-contained breathing apparatus and full protective clothing when necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Minimize generation of dust. Use appropriate protective equipment to avoid inhalation and eye contact if dust is generated.

Environmental precautions: Notify authorities as required by local, state and federal regulations.

Methods and materials for containment and cleaning up: Pick up, sweep up or vacuum any dust, and place in a container for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling: Use only with adequate ventilation. Avoid breathing dust. Wash thoroughly after handling and use, especially before eating, drinking or smoking. Consider potential exposure to components of the base materials or coatings being brushed, machined or ground. Refer to OSHA's substance specific standards for additional work practice requirements where applicable.

Conditions for safe storage, including any incompatibilities: Store in a dry location. See section 10 for more information on incompatible materials.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines:

| Iron | None Established |
|-------------------------------------|--|
| Nickel (as nickel metal) | 1 mg/kg TWA OSHA PEL |
| | 1.5 mg/kg TWA ACGIH TLV (inhalable fraction) |
| Chromium | 0.5 mg/m3 TWA ACGIH TLV |
| | 1 mg/m3 TWA OSHA PEL |
| Manganese | 0.2 mg/m3 TWA ACGIH TLV (respirable) |
| | 5 mg/m3 Ceiling OSHA PEL |
| Silicon | 15 mg/m3 TWA OSHA PEL (total dust) |
| | 5 mg/m3 TWA OSHA PEL (respirable fraction) |
| Molybdenum (as insoluble compounds) | 10 mg/m3 TWA ACGIH TLV (inhalable) |
| | 3 mg/m3 TWA ACGIH TLV (respirable) |
| | 15 mg/m3 TWA OSHA PEL (total dust) |

Note: Consider also components from base materials and coatings.

Appropriate engineering controls: Ensure adequate ventilation to maintain exposures below occupational limits. Whenever possible the use of local exhaust ventilation or other engineering controls is the preferred method of controlling exposure to airborne dust and fume to meet established occupational exposure limits. Use good housekeeping and sanitation practices. Do not use tobacco or food in work area. Wash thoroughly before eating or smoking. Do not blow dust off clothing or skin with compressed air.

Individual protection measures, such as personal protective equipment:

Respiratory protection: Use an approved respirator if exposure limits are exceeded or where dust exposures are excessive. Consider the potential for exposure to components of the coatings or base material being ground in selecting proper respiratory protection. Refer to local regulations for specific standards where appropriate. Selection of respiratory protection depends on the contaminant type, form and concentration. Select and use respirators in accordance with applicable regulations and good industrial hygiene practice.

Hand protection: Cloth or leather gloves recommended.

Skin protection: Protective clothing as needed to prevent contamination of personal clothing. Hearing protection may be required.

Eye protection: Safety goggles or face shield over safety glasses with side shields.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance (physical state, color, etc.): Solid gray-black brushes. Odor: No Odor

| Odor threshold: Not applicable | pH: Not applicable |
|--|---|
| Melting point/freezing point: Not applicable | Boiling Point: Not applicable |
| Flash point: Non-Combustible | Evaporation rate: Not applicable |
| Flammability (solid, gas): Not applicable | |
| Flammable limits: LEL: Not applicable | UEL: Not applicable |
| Vapor pressure: Not applicable | Vapor density: |
| Relative density: 7 | Solubility(ies): Not soluble |
| Partition coefficient: n-octanol/water: Not | Auto-ignition temperature: Not applicable |
| applicable | |
| Decomposition temperature: Not applicable | Viscosity: Not applicable |

10. STABILITY AND REACTIVITY

Reactivity: Not reactive Chemical stability: Stable Possibility of hazardous reactions: None known. Conditions to avoid: None known Incompatible materials: None known Hazardous decomposition products: Dust from brushing and grinding could contain ingredients listed in Section 3 and other, potentially more hazardous components of the base material being brushed or coatings

applied to the base material.

11. TOXICOLOGICAL INFORMATION

Inhalation, skin, eyes. Product as shipped does not present an inhalation hazard; however subsequent operations may create dusts or fumes which could be inhaled.

Routes of exposure:

Ingestion: None expected under normal use conditions. May be harmful if swallowed. **Inhalation:** Dust may cause respiratory irritation. May be harmful by inhalation. Prolonged inhalation may cause lung damage. **Eye:** Dust may cause eye irritation. Dust particles may cause abrasive injury to the eyes.

Skin: None expected under normal use conditions. Rubbing product across the skin may cause mechanical irritation or abrasions.

Chronic: Long-term overexposure to respirable dust may cause lung damage (fibrosis) with symptoms of coughing, shortness of breath and diminished breathing capacity. Chronic effects may be aggravated by smoking. Prolonged exposure to elevated noise levels during operations may affect hearing. A greater hazard, in most cases, is the exposure to the dust/fumes from the material or paint/coatings being brushed. Most of the dust generated during brushing is from the base material being brushed and the potential hazard from this exposure must be evaluated.

Carcinogenicity: None of the components of this product are listed as a carcinogen or potential carcinogen by OSHA, NTP or IARC.

Germ Cell Mutagenicity: Not expected to be a mutagen. Reproductive Toxicity: Not expected to cause reproductive toxicity.

Numerical measures of toxicity:

No toxicity data available for the product.

12. ECOLOGICAL INFORMATION

Ecotoxicity: No data available for the product.

Persistence and degradability: Biodegradation is not applicable to inorganic compounds.
Bioaccumulative potential: No data available
Mobility in soil: No data available.
Other adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with Federal, State and Local regulations. Local regulations may be more stringent than regional and national requirements. It is the responsibility of the waste generator to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.

Packaging: Dispose of in accordance with Federal, State and Local regulations. Local regulations may be more stringent than regional and national requirements. It is the responsibility of the waste generator to determine the toxicity and physical characteristics of the material to determine the proper waste identification and disposal in compliance with applicable regulations.

UN Number Proper shipping name Hazard Packing Environmental Class Group Hazard DOT Not Regulated None None None TDG None Not Regulated None None

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None identified.

14. TRANSPORT INFORMATION

15. REGULATORY INFORMATION

SARA Section 311/312 Hazard Categories: Chronic Health

SARA Section 313: This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 (Toxic Chemical Release Reporting): None

California Proposition 65: WARNING: You create dust when you cut, sand, drill or grind materials such as wood, paint, cement, masonry or metal. This product & the dust it creates contains chemicals known in the state of California to cause cancer and birth defects or other reproductive harm.

EPA TSCA Inventory: All the components in the product are listed on the TSCA inventory.

16. OTHER INFORMATION

NFPA Rating: Health = 1Flammability = 0Instability = 0HMIS Rating: Health = 1Flammability = 0Physical Hazard =0*Chronic health hazardFlammability = 0Physical Hazard =0

Date Previous Revision: 3/31/15 Date This Revision: 9/16/15 Revision Summary: 06/26/12: Periodic MSDS review: Updated exposure limits. 3/31/15: Changed all sections. Updated format to GHS. 9/16/15: Change in formulation. All sections revised.

The preceding information is believed to be correct and current as of the date of preparation of this Material Safety Data Sheet. Since the use of this information and the conditions of use of this product are not within the control of United Abrasives, Inc., it is the user's obligation to assure safe use of this product.