

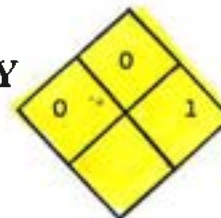


REV #1  
1/20/92

Information and Emergency Number  
(414) 255-3200

Issue Date  
11/1/91

**MATERIAL SAFETY  
DATA SHEET**



HEALTH: 0  
FIRE: 0  
REACTIVITY: 1

**SECTION 1 - PRODUCT IDENTIFICATION**

MANUFACTURER'S NAME

MILWAUKEE BRUSH MFG. CO. W142 N9251 FOUNTAIN BLVD. MENOMONEE FALLS, WI 53051

PRODUCT NAME/TRADE NAME

COMMON NAME/GRADE

Stainless Steel Wire Brushes

Wheel, Cup, End, Roll Cleaning,  
and Stem Mounted

**SECTION 2 - HAZARDOUS INGREDIENTS**

NOTE: PRODUCTS UNDER NORMAL CONDITIONS DO NOT REPRESENT AN INHALATION, INGESTION, OR CONTACT HEALTH HAZARD.

BASE METAL, ALLOYING ELEMENTS

AND METALLIC COATINGS

% COMPOSITION BY WEIGHT (1)

ACGIH TLV (mg/m<sup>3</sup>) (2)

Component Iron Base

N/A

Fill Material

COMPONENT	CAS. NO.	COMPONENT	CAS. NO.
Chromium	7440-47-3	Molybdenum	7439-98-7
Cobalt	7440-48-7	Nickel	7440-02-0
Copper	7440-50-8	Silicon	7440-21-3
Iron	7439-89-6		
Manganese	7439-96-5		

COMPONENT	PEL.	TLV-TWA	COMPONENTS	PEL.	TLV-TWA
Chromium	1	0.5	Molybdenum	15	10
Cobalt	0.1	0.05	Nickel	1	1
Copper	1	1	Silicon	None	5
Manganese	C5	C5			

(C-Ceiling Limit)

1) % OF ALLOYING MATERIAL VARIES WITH GRADE OF MATERIAL  
2) 1985-1986 ACGIH THRESHOLD LIMIT VALUE

**SECTION 3 - PHYSICAL DATA**

MATERIAL IS (AT NORMAL CONDITIONS)

Solid

APPEARANCE AND ODOR

Gray - No Odor

MELTING POINT (BASE METAL)

SPECIFIC GRAVITY

N/A

8.1

**SECTION 4 - FIRE AND EXPLOSION**

EXTINGUISHING MEDIA

Non-flammable in air.

SPECIAL FIRE FIGHTING PROCEDURES

N/A

UNUSUAL FIRE AND EXPLOSION HAZARDS

N/A

**SECTION 5 - REACTIVITY DATA**

STABILITY

Stable

INCOMPATIBILITY (MATERIALS TO AVOID)

CONDITIONS TO AVOID

N/A

HAZARDOUS DECOMPOSITION PRODUCTS

Smokes and/or gases produced from welding or burning operations.



THE MILWAUKEE BRUSH MANUFACTURING CO.  
W142 N9251 FOUNTAIN BOULEVARD • P O BOX 830  
MENOMONEE FALLS, WISCONSIN 53051 0830 • 414/255-3200

**SECTION 6 - HEALTH HAZARD DATA**

NOTE: STEEL PRODUCTS IN THE NATURAL STATE DO NOT PRESENT AN INHALATION, INGESTION, OR CONTACT HAZARD, HOWEVER OPERATIONS SUCH AS BURNING, WELDING, SAWING, BRAZING, AND GRINDING MAY RELEASE FUMES AND/OR DUSTS WHICH MAY PRESENT HEALTH HAZARDS IF TLV's ARE EXCEEDED.

MAJOR EXPOSURE HAZARD

INHALATION     SKIN CONTACT     SKIN ABSORPTION     EYE CONTACT     INGESTION

EFFECTS OF OVEREXPOSURE

Short-term exposure to gases and dust can be dangerous to your health and may result in discomfort such as dizziness, nausea, fever, dryness and/or irritation of nose, throat, and eyes. Acute exposure can result in same symptoms, but to a greater degree. Some workers may experience discomfort at concentrations below the threshold limit values and others may be affected by a pre-existing condition or other occupational illness because of the wide variation in individual susceptibilities. Fumes, gases, and dust can be a health hazard through inhalation.

Chronic exposure may result in neurological damage, lung fibrosis, pneumonconiosis, and other lung diseases.

Nickel and Chromium are considered possible carcinogens under OSHA (29CFR 1910.1200). There is considerable controversy on the extent of the respiratory cancer problem due to Nickel and Chromium. Nevertheless, exposures must be maintained below the levels specified in Section II, III, and VI.

EMERGENCY AND FIRST AID PROCEDURES

Remove from exposure area and call for medical aid. Administer oxygen if breathing is difficult. If not breathing, begin artificial respiration. If no detectable pulse, begin external heart massage. Employ first aid techniques recommended by the American Red Cross.

**SECTION 7 - SPILL OR LEAK PROCEDURES**

SPILL OR LEAK PROCEDURES

N/A

WASTE DISPOSAL METHODS

Clean up any grinding dust or waste residues and place in suitable Department of Transportation (DOT) approved containers and dispose of in full compliance with Federal, State, and local regulations. Avoid inhalation and skin exposure.

**SECTION 8 - SPECIAL PROTECTION**

RESPIRATORY

Use only NIOSH-approved respirators when engineering controls are not adequate to lower exposure levels below applicable exposure limit.

VENTILATION

Use enough ventilation to keep exposure below limits of Section 2.

EYE PROTECTION AND PROTECTIVE CLOTHING

Refer to Section 10.

**SECTION 9 - SPECIAL PRECAUTIONS**

**SECTION 10 - WARNING**

In normal power brushing operations, the material being removed such as burrs, scale, dirt, weld slag, or other residue, will fly off the brush with considerable force, along with the brush filaments which break off due to fatigue.

The potential of serious injury exists for both the brush operator and others in the work area (possibly 50 or more feet from the brush). To protect against this hazard, before rotating the brush and until rotation stops, operators and others in the area must wear SAFETY GOGGLES OR FULL FACE SHIELDS WORN OVER CLOTHING. SAFETY GLASSES WITH SIDE SHIELDS, along with PROTECTIVE CLOTHING.

You must follow all operator and safety instructions, as well as common safety practices which will reduce the likelihood of severity of physical injury.

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