

MATERIAL SAFETY DATA SHEET

I. - IDENTIFICATION

<u>Manufacturer's Name</u> Simonds International 135 Intervale Road Fitchburg, MA 01420 (978) 424-0100	<u>Product Identification</u> Trade Name: Bandsaws, Circular Saws, (except 529) and Cutters, Gang and Hole Saws, Hacksaw Blades, Bits and Shanks Date: June 22, 2004
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II. - HAZARDOUS INGREDIENTS

<u>Alloying Elements</u>			OSHA PEL (MG/M ³)	ACGIH TLV (MG/M ³)
<u>Base Metal</u>	<u>% Weight</u>	<u>CAS No.</u>		
<u>Alloying Elements:</u>				
Carbon (C)	.18/1.60	1333-86-4	3.5 (Carbon Black)	3.5
Manganese (Mn)	.10/1.25	7439-96-5 (Dust)	5 (Ceiling)	5 (Ceiling)
		(Fumes)	---	1
Silicon (Si)	.10/2.0	7440-21-3	---	5 (Respirable Dust)
Nickel (Ni)	.011/2.70	7440-02-0	1	1
Chromium (Cr)	.02/13	7440-47-3	1	0.5
Tungsten (W)	.40/19	7440-33-7	---	5
Vanadium (V)	.001/2.50	1314-62-1 (Dust)	.5 (Ceiling)	.05
		(Fumes)	.1 (Ceiling)	.05
Molybdenum (Mo)	.004/9.75	7439-98-7	15	10
Cobalt (Co)	.005/15	7440-48-4	.05	0.1
<u>Base Metal:</u>				
Iron	Balance	1309-37- (Fumes)	10	5

*Note:

III. - PHYSICAL DATA

Melting Point	2750°	Vapor Density (Air - 1)	N/A
Base Metal		% Volatile by Volume	N/A
Specific Gravity	7.5 - 8.5	Appearance & Odor - Various Shapes	
Boiling Point	5000°	Solid, Odorless	
Melting Point	Approx. 2500°	Solubility in Water	Insoluble
Vapor Pressure	N/A	Evaporation (Butyl Acetate-1)	N/A

IV. - FIRE AND EXPLOSION DATA

Flash Point: None	Fire Point: None
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V. - HEALTH HAZARD DATA

Steel products in the form shipped do not present a health hazard. However, subsequent operations such as cutting, welding, and grinding may cause a release of dust or fumes which may cause some of the ingredients to change to a form which could affect workers if they are exposed to levels above the PEL and TLV listed in Sect II.

Primary routes of entry: Emergency First Aid
 Inhalation Remove to fresh air; if condition continues consult physician.
 Eye Contact Flush well with running water; get medical attention.
 Skin Contact Wash area well with soap and water.
 Ingestion Seek Medical Help if large quantities of material have been ingested.

Effects of overexposure:
 Acute: Irritation of eyes, nose or throat, metallic taste in mouth, or metal fumes fever, possible dermatitis
 Chronic: Prolonged overexposure to alloy dust or fumes may cause skin, eye, throat or nose irritations leading to pulmonary diseases. Excessive and repeated inhalation of chromium and nickel fumes or dust may cause severe irritation, ulceration and increase risk of cancer in the respiratory system. Excessive and prolonged inhalation of manganese can cause central nervous system damage resembling a Parkinson-like syndrome.

VI. - REACTIVITY DATA

Stability: Chemically stable.
Incompatibility: Reacts with strong acids to generate hydrogen gas.
Hazardous decomposition products: Metallic oxides.

VII. - SPILLS AND LEAKS

Steps to take in case of release or spill: N/A
Waste disposal method: Sale as Scrap
Dust, etc.: Follow federal, state and local regulations regarding disposal.

VIII. - SPECIAL PROTECTION INFORMATION

Use general and local exhaust ventilation to keep airborne concentrations of dust and fumes below the PEL's and TLV's of Sect II. Employees should wear NIOSH- or MSHA-approved respirators and full protective clothing for protection against heavy concentration of dust or fumes. Gloves and barrier creams may be necessary to prevent skin sensitization and dermatitis.

Approved safety glasses with side shields, or goggles, should be worn.

IX. - SPECIAL PRECAUTIONS

Localized exhaust and/or respiratory protection must be provided if exposure limits in Sect II are exceeded.

Use good housekeeping practices to prevent accumulation of dust and fumes and keep airborne dust and fumes level below PEL and TLV levels.

All information, recommendations and suggestions contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made by Simonds Industries Inc. with respect to the information provided.

Employers should use this information only as a supplement to other available data. Since the use of these products is beyond our control, it is each user's, and the employer of the user's responsibility to assure the safety and health of the users. Simonds Industries Inc. will not assume liability arising out of the use of these products by others.

WARNING LABEL

Bandsaws, circular saws and cutters, gang and hole saws, hacksaw blades, bits and shanks contain the following substances: Chromium, cobalt, nickel, and vanadium.

Read Material Safety Data Sheets before cutting, grinding, or welding.

- * Avoid breathing dust or mist.
- * Avoid prolonged skin contact with dust or mist.
- * Use adequate ventilation when grinding.
- * Maintain dust level below OSHA and ACGIH levels.
- * Use protective devices.
- * Wash hands thoroughly before eating or smoking.
- * Dispose of materials according to local, state and/or federal regulations.

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*Note: Cobalt, Chromium, Manganese, Nickel and Vanadium are subject to reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.
