



HAMILTON SPECIALTY BAR (2007), INC.

HSB

MATERIAL SAFETY DATA SHEET

Flammability - 0

Reactivity - 0

SECTION I - MATERIAL IDENTIFICATION AND USE

WHMIS Classification D2A

Material Name	Carbon and Microalloyed Steel		Product Identification Number	Not Applicable	
Manufacturer's Name	Hamilton Specialty Bar (2007) Inc.		Suppliers Name	Hamilton Specialty Bar (2007) Inc.	
Street Address	P.O. Box 2943, 319 Sherman Ave. N.,		Street Address	P.O. Box 2943, 319 Sherman Ave. N.	
City	Hamilton	Province	Ontario		
Postal Code	L8N 3R5	Emergency Telephone No. (905) 312-8650	Postal Code	L8N 3R5	
Chemical Name	Not Applicable	Chemical Family	Alloyed Metal	Emergency Telephone No. (905) 312-8650	
Molecular Weight	Not Applicable	Trade Names and Synonyms	None	Chemical Formula	Not Applicable
				Material Use	Intermediate Steel Product

SECTION II - HAZARDOUS INGREDIENTS OF MATERIAL

Hazardous Ingredients	Approximate Concentration %	C.A.S. N.O. U.N. Numbers	ACGIH TLV-TWA "Exposure Limits"	LD ₅₀ /LC ₅₀ Species & Route
Iron	< 99.50	7439-89-6	Iron oxide fume 5mg/m ³	Not available
Manganese	1.80	7439-96-5	Fume 1mg/m ³ Dust 5 mg/m ³ (ceiling)	Rat, oral 9g/kg
Nickel	0.50	7440-02-0	1 mg/m ³	Not available
Chromium	0.60	7440-47-3	0.5 mg/m ³	Not available
Copper	0.60	7440-50-8	Fume 0.2 mg/m ³ Dust 1.0 mg/m ³	Not available
Vanadium	0.12	7440-62-2	Pentoxide-fume 0.05mg/m ³	Not available
Arsenic	0.01	7440-38-2	0.01 mg/m ³	Not available

SECTION III - PHYSICAL DATA FOR MATERIAL

Physical State	Solid	Odour & Appearance	Steel gray;no odour	Odour Threshold (p.p.m)	Not applicable	Specific gravity	Not available	
Vapour Pressure (mm)	Not Applicable	Vapour Density (Air=1)	Not Applicable	Evaporation Rate	Not Applicable	PH	Not Applicable	
Solubility in Water (20 °C)	Not Soluble	Boiling pt. (°C)	Not Available	Freezing pt. (°C)	Not Available	%Volatile (by volume)	Not Applicable	
							Coefficient of water/oil distribution	Not Applicable

SECTION IV - FIRE AND EXPLOSION HAZARD OF MATERIAL

Flammability	No	If yes, under which conditions	
Means of Extinction	Does not burn. Use extinguisher appropriate for material which is burning		
Special Procedures	None		
Flashpoint (°C) & Method	Not Applicable	Upper explosion limit (% by volume)	Not Applicable
		Lower explosion limit (% by volume)	Not Applicable
Auto Ignition Temperature (°C)	Not Applicable	Hazardous Combustion Products	
		Metal Oxide Fumes	
Explosion Data- Sensitivity to Chemical Impact	Not Applicable	Rate of Burning	Not Applicable
		Explosive Power	Not Applicable
Sensitivity to Static Discharge			
Not Applicable			

SECTION V - REACTIVITY DATA

Chemical Stability	Yes	If no under what conditions?
Incompatibility to other substances	Yes	If so which ones? Strong mineral acids
Reactivity and under what conditions	Generally not reactive but can produce flammable and explosive hydrogen gas with strong acids, and some halogens	
Hazardous Decomposition Products	Metal fumes and/or oxides may be produced during welding, torch cutting, grinding, machining or melting	



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Carbon and Microalloyed Steel

SECTION VI - TOXICOLOGICAL PROPERTIES OF PRODUCT

Route of entry	Skin Contact	Skin Absorption	Eye Contact	Inhalation Acute	Inhalation Chronic	Ingestion
			X	X	X	

Effects of Acute Exposure to Product

**This product is only hazardous during processing which produces dusts, mists, or fumes
Inhalation may cause respiratory irritation or disease.**

Effects of Chronic Exposure to Product

Repeated Inhalation of dusts or fumes for many months or years may cause respiratory diseases.

LD ₅₀ of product (Specify Species and Route) Not Applicable	Irritancy of Product Fumes may irritate eyes, nose & throat	Exposure Limits of product N/A
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LD50 of product (Specify Species) Not Applicable	Sensitization of Product Not a sensitizer	Synergistic materials None Known
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Carcinogenicity	Reproductive effects	Teratogenicity	Mutagenicity
X			

Arsenic, chromium and nickel compounds are carcinogens listed by IARC

SECTION VII - PREVENTIVE MEASURES

Personal Protective Equipment **Personal protective equipment used will depend on the nature of the work process**

Gloves (Specify)	Respiratory (Specify)	Eye (Specify)
If needed	NIOSH approved fume respirator if needed	As required for welding/grinding

Clothing (Specify)	Other (Specify)
Aprons, face shield	Wear as needed to prevent breathing dusts and fumes.

Engineering Controls (e.g. ventilation, enclosed process, specify) **Torch cutting, welding & grinding should be performed with sufficient ventilation**

Leak and Spill Procedure

Not Applicable

Water Disposal **Consult local environmental authorities**

Handling Procedures and Equipment **None**

Storage Requirements **No special requirements**

Special Shipping Information **None**

SECTION VII - FIRST AID MEASURES

Skin

Wash thoroughly with water. Consult physician if irritation persists

Eye

Flush eyes with large amounts of lukewarm gently running water for 20 minutes. Consult physician if irritation persists.

Inhalation

Move person to fresh air. Give artificial respiration if breathing has stopped. Seek medical attention if necessary.

Ingestion

Not Applicable

General Advice **Consult physician for all serious overexposures.**

SECTION IX -PREPARATION DATE OF M.S.D.S

Additional Information/Comments

This information is given in good faith and is taken from sources believed reliable as of the date stated. HSB Corporation accepts no liability for loss or damage incurred as a result of use or reliance upon the information given not for any inaccuracy or incompleteness in MSDS.

Species Used

RTECS, Doc of TLVS, HSB Inc.Data, Dangerous Properties of Industrial Materials Seventh Edition

Prepared by	Phone Number	Revision Date	Supersedes
D. Bodo	(905) 312-8650 ext.5023	30-Nov-07	30-Jun-04