MET111

MATERIAL SAFETY DATA SHEET

I. - IDENTIFICATION

Manufacturer's Name imonds Industries Inc. 0 Intervale Road Fitchburg, MA 01420 (508) 343-3731

DATA	SHEET	L	410	2	SI M Z	\
TION				•		
	Produ	ct Iden	tificat	tion		
	(e Ho	xcept 5	29) and	i Cut	Circular ters; Gan lades; B:	ng
	Date:	June,	1988			
IS TNO	REDIENTS					

	II	HAZARDOUS	INGREDIENTS	
Alloying Elements			OSHA PEL	ACGIH TLV
		CAS No.	(MG/M^3)	(MG/M^3)
Alloying Elements:				
Carbon (C) .18/1.60 1333-86-4		3.5 (Carbon Bla	ack) 3.5	
Manganese (Mn) .10/1.25		7439-96-5 (Du	st) 5 (Ceiling)	5 (Ceiling
-		(Fu	mes)	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)	.001/2.5	1314-62-1 (Du (Fu	st) .5 (Ceiling) mes) .1 (Ceiling)	.05 .05
Molybdenum (Mo)	.004/9.75	7439-98-7	15	10
Cobalt (Co)	.005/15	7440-48-4	.05	0.1
Base Metal:				
Iron * Note:	Balance	1309-37-1 (Fu		5
		I PHYSICAL		
lting Point	2750°F.		Vapor Density (Air -	
ase Metal			% Volatile by Volume	N/A
Specific Gravity'	7.5-8.5		Appearance & Odor - V	
Boiling Point	5000°F.	a c a a 9-	-	, Odorless Insolub
Melting Point	Approx.	2500°F.	Solubility in Water	
Vapor Pressure	N/A		Evaporation (Butyl Ac	cetate-1) N/A
	IV.	- FIRE AND EXE	LOSION DATA	
Flash Point: None				Fire Point: None
	۷.	- HEALTH HAZAR	D DATA	
ations such as cutti	ing, welding, gr ngredients to cr	rinding may cau nange to a form	a health hazard. How nse a release of dust of which could affect wo n Section II.	or fumes which may
Primary routes of en Inhalation Eye contact Skin contact	ntry: Emer Remain Flus Mask	rgency First A ove to fresh a sh well with ru h area well wit	it; if condition continuing water; get medic	cal attention.
Effects of overexpos	sure:			webst fumos for
A	- 6	لمحمد مدريهما مراجع	11 de marge de manifels de	- motel fumes fever

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 REACTIVI	ITY DATA	-
Stability: Chemically stable.		
Incompatibility: Reacts with strong acids t	to generate hydrogen gas.	- (°-)`
Hazardous decomposition products: Metallic	oxides.	\cup
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 SPECIAI	L PROTECTION INFORMATION	
Use general and local exhaust ventilation to below the PEL's and TLV's of Section II. Emp respirators and full protective clothing for or fumes. Gloves and barrier creams may be a dermatitis.	ployees should wear NIOSH- or MSHA-approv protection against heavy concentration of	ed f dust
Approved safety glasses with side shields, or	r goggles, should be worn.	
IX SPECIAI	L PRECAUTIONS	
Localized exhaust and/or respiratory protect: Section II are exceeded.	ion must be provided if exposure limits i	.n
dust and fumes level below PEL and TLV levels	ccumulation of dust and fumes and keep ai s.	LDOINE
All information, recommendations and suggest believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with respe	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided.	inQ.
All information, recommendations and suggest: believed to be correct. However, no guarants	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri	im Of Since of the
All information, recommendations and suggests believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our conts user's responsibility to assure the safety as	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others.	im Of Since of the
All information, recommendations and suggest believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our conts user's responsibility to assure the safety as will not assume liability arising out of the	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. LABEL d hole saws, hacksaw blades, bits & shank	Since of the es Inc.
All information, recommendations and suggests believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our conts user's responsibility to assure the safety as will not assume liability arising out of the WARNING M Bandsaws, circular saws and cutters, gang and the following substances: Chromium, cobalt,	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. <u>LABEL</u> d hole saws, hacksaw blades, bits & shank nickel, and vanadium.	Since of the es Inc
All information, recommendations and suggests believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our conts user's responsibility to assure the safety and will not assume liability arising out of the WARNING I Bandsaws, circular saws and cutters, gang and the following substances: Chromium, cobalt, Read Material Safety Data Sheets before cutts	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. <u>LABEL</u> d hole saws, hacksaw blades, bits & shank nickel, and vanadium.	im Since of the es Inc
All information, recommendations and suggests believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our conts user's responsibility to assure the safety and will not assume liability arising out of the WARNING I Bandsaws, circular saws and cutters, gang and the following substances: Chromium, cobalt, Read Material Safety Data Sheets before cutts * Avoid breathing dust or mist.	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. LABEL d hole saws, hacksaw blades, bits & shank nickel, and vanadium. ing, grinding, or welding.	Since of the es Inc
All information, recommendations and suggest: believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our contr user's responsibility to assure the safety and will not assume liability arising out of the WARNING I Bandsaws, circular saws and cutters, gang and the following substances: Chromium, cobalt, Read Material Safety Data Sheets before cutt: * Avoid breathing dust or mist. * Avoid breathing dust or mist.	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. LABEL d hole saws, hacksaw blades, bits & shank nickel, and vanadium. ing, grinding, or welding.	Since of the es Inc
All information, recommendations and suggest: believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our cont: user's responsibility to assure the safety and will not assume liability arising out of the WARNING H Bandsaws, circular saws and cutters, gang and the following substances: Chromium, cobalt, Read Material Safety Data Sheets before cutt: * Avoid breathing dust or mist. * Avoid breathing dust or mist. * Avoid prolonged skin contact with dust or * Use adequate ventilation when grinding.	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. LABEL d hole saws, hacksaw blades, bits & shank nickel, and vanadium. ing, grinding, or welding. mist.	Since of the es Inc
All information, recommendations and suggest: believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our cont: user's responsibility to assure the safety and will not assume liability arising out of the WARNING H Bandsaws, circular saws and cutters, gang and the following substances: Chromium, cobalt, Read Material Safety Data Sheets before cutt: * Avoid breathing dust or mist. * Avoid breathing dust or mist. * Avoid prolonged skin contact with dust or * Use adequate ventilation when grinding. * Maintain dust level below OSHA and ACGIH	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. LABEL d hole saws, hacksaw blades, bits & shank nickel, and vanadium. ing, grinding, or welding. mist.	Since of the es Inc
All information, recommendations and suggests believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our conts user's responsibility to assure the safety at will not assume liability arising out of the WARNING I Bandsaws, circular saws and cutters, gang and the following substances: Chromium, cobalt, Read Material Safety Data Sheets before cutts * Avoid breathing dust or mist. * Avoid breathing dust or mist. * Use adequate ventilation when grinding. * Maintain dust level below OSHA and ACGIH * Use protective devices.	s. ions contained herein are based upon data as or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. <u>LABEL</u> d hole saws, hacksaw blades, bits & shank nickel, and vanadium. ing, grinding, or welding. mist. levels.	Since of the es Inc.
All information, recommendations and suggest: believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our cont: user's responsibility to assure the safety and will not assume liability arising out of the WARNING H Bandsaws, circular saws and cutters, gang and the following substances: Chromium, cobalt, Read Material Safety Data Sheets before cutt: * Avoid breathing dust or mist. * Avoid breathing dust or mist. * Avoid prolonged skin contact with dust or * Use adequate ventilation when grinding. * Maintain dust level below OSHA and ACGIH	s. ions contained herein are based upon data ae or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. <u>LABEL</u> d hole saws, hacksaw blades, bits & shank nickel, and vanadium. ing, grinding, or welding. mist. levels. oking.	Since of the es Inc.
All information, recommendations and suggest: believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our contri- user's responsibility to assure the safety and will not assume liability arising out of the WARNING H Bandsaws, circular saws and cutters, gang and the following substances: Chromium, cobalt, Read Material Safety Data Sheets before cutt: * Avoid breathing dust or mist. * Avoid breathing dust or mist. * Avoid prolonged skin contact with dust or * Use adequate ventilation when grinding. * Maintain dust level below OSHA and ACGIH * Use protective devices. * Wash hands thoroughly before eating or smothants * Dispose of materials according to local,	s. ions contained herein are based upon data ae or warranty of any kind, expressed or act to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. LABEL d hole saws, hacksaw blades, bits & shank nickel, and vanadium. ing, grinding, or welding. mist. levels. oking. state and/or federal regulations.	Since of the es Inc
All information, recommendations and suggest: believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our contri- user's responsibility to assure the safety and will not assume liability arising out of the WARNING H Bandsaws, circular saws and cutters, gang and the following substances: Chromium, cobalt, Read Material Safety Data Sheets before cutt: * Avoid breathing dust or mist. * Avoid breathing dust or mist. * Avoid prolonged skin contact with dust or * Use adequate ventilation when grinding. * Maintain dust level below OSHA and ACGIH * Use protective devices. * Wash hands thoroughly before eating or smathing to local, and Dispose of materials according to local, and the simonds In-	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. <u>LABEL</u> d hole saws, hacksaw blades, bits & shank nickel, and vanadium. ing, grinding, or welding. mist. levels. oking. state and/or federal regulations. dustries Inc.	Since of the es Inc.
All information, recommendations and suggest believed to be correct. However, no guarante is made by Simonds Inudstries Inc. with respect Employers should use this information only as the use of these products is beyond our contr user's responsibility to assure the safety at will not assume liability arising out of the WARNING I Bandsaws, circular saws and cutters, gang and the following substances: Chromium, cobalt, Read Material Safety Data Sheets before cutt: * Avoid breathing dust or mist. * Avoid breathing dust or mist. * Maintain dust level below OSHA and ACGIH * Use protective devices. * Wash hands thoroughly before eating or smathing * Dispose of materials according to local, Simonds In- 100 Interva	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. <u>LABEL</u> d hole saws, hacksaw blades, bits & shank nickel, and vanadium. ing, grinding, or welding. mist. levels. oking. state and/or federal regulations. dustries Inc. ale Road	Since of the es Inc.
All information, recommendations and suggest: believed to be correct. However, no guarants is made by Simonds Inudstries Inc. with response Employers should use this information only as the use of these products is beyond our contri- user's responsibility to assure the safety and will not assume liability arising out of the WARNING H Bandsaws, circular saws and cutters, gang and the following substances: Chromium, cobalt, Read Material Safety Data Sheets before cutt: * Avoid breathing dust or mist. * Avoid breathing dust or mist. * Avoid prolonged skin contact with dust or * Use adequate ventilation when grinding. * Maintain dust level below OSHA and ACGIH * Use protective devices. * Wash hands thoroughly before eating or smo * Dispose of materials according to local, Simonds In-	s. ions contained herein are based upon data ee or warranty of any kind, expressed or ect to the information provided. s a supplement to other available data. rol, it is each user's, and the employer nd health of the users. Simonds Industri use of these products by others. <u>LABEL</u> d hole saws, hacksaw blades, bits & shank nickel, and vanadium. ing, grinding, or welding. mist. levels. oking. state and/or federal regulations. dustries Inc. ale Road MA 01420	Since of the es Inc.

.

* <u>Note</u>: 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.

-

.

SIM1416

I. - IDENTIFICATION

facturer's Name nds Cutting Tools 100 Intervale Road Fitchburg, MA 01420 (617) 343-3731

Product Identification Trade Name: Bandsaws; Circular Saws and Cutters; Gang and Hole Saws; Hacksaw Blades; Bits & Shanks Date: January 1986

	II	. HAZARDOUS I	NGREDIENT	[S	
Alloying Elements,				OSHA PEL (MG/M ³)	ACGIH, TLV
Base Metal	% Weight	CAS No.		(MG/M^3)	(MG/M ³)
Alloying Elements:					
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)	5.5 5 (Ceiling)
			(Funes)	(cering)	.
Silicon (Si)	.10/2.0	7440-21-2			1 5 (Dec. 1.1)
(01)	110/210	1440 21 2			5 (Respirable
Nickel (Ni)	.25/2.70	7440-02-0		1	Dust)
Chromium (Cr)	.15/13	7440-47-3			1
Tungsten (W)	.40/19	7440-33-7		1	0.5
Vanadium (V)	.08/2.5			==	5
	.00/2.5	1314-62-1		.5 (Ceiling)	.05
Molybdenum (Mo)	.10/9.75		(Fumes)	.1 (Ceiling)	.05
		7439-98-7		15	10
Cobalt (Co)	1.0/15	7440-48-4		0.1	0.1
Base Metal:	• •		~ … ``		
Iron	Balance	1309-37-1 ((Fumes)	10	5
					······································
X Data Datat		PHYSICAL			
r ng Point	2750°F_			r Density (Air = 1)	N/A
b. Metal				latile by Volume	N/A
Specific Gravity	7.5-8.5		Appea	arance & Odor - Vario	
Boiling Point	5000°F.			Solid, Odo	
Melting Point	Approx.	2500°F.		bility in Water	Insoluble
Vapor Pressur e	N/A		Evapo	oration (Butyl Acetat	e=1) N/A
				· · · · · · · · · · · · · · · · · · ·	
	IV.	- FIRE AND E	XPLOSION		
Flash Point: None	•				Fire Point: None
		- HEALTH HAZA			
				aith hazard. However	
ations such as cutt	ing, welding,	grinding may	cause a r	elease of dust or fu	mes which may cause
Some of the ingredi	ents to change	to a form wh	ich could	l affect workers if t	hey are exposed to
levels above the PE	L and TLV list	ed in Section	II.		
	_	— .			
Primary routes of e		rgency First			
Inhalation				condition continues co	
Eye contact	Flu	sh well with	running w	ater; get medical at	tention.
Skin contact					
Ingestion			p if larg	e quantities of mate:	rial have been
		ested.			
Effects of overexpo					
		e or throat, I	petallic	taste in mouth, or me	etal fumes fever,
	dermatitis.				
				may cause skin, eye	
					d inhalation of cobalt
					ceration and increased
				cessive and prolonged	
manganese	can cause cent	ral nervous	system da	mage resembling a Par	rkinson-like syndrome.
#7BB/3					-

	· ·
VI REACTIVI	TY DATA
Stability: Chemically stable.	
Incompatibility: Reacts with strong acid	s to generate hydrogen gas.
Hazardous decomposition products: Meta	llic oxides.
	\cup
VII SPILLS	AND LEAKS
Steps to take in case of release or spill:	N/A
laste disposal method:	Sale as scrap.
Just, etc.:	Follow federal, state and local
	regulations regarding disposal.
	0 - ··· -·0·····0 -···
	L PROTECTION INFORMATION
se general and local exhaust ventilation to	keep airborne concentrations of dust and fumes
elow the PEL's and TLV's of Section II. Em	ployees should wear NIOSH- or MSHA-approved
espirators and full protective clothing for	protection against heavy concentration of dust or
umes. Gloves and barrier creams may be nece	essary to prevent skin sensitization and dermatitis.
	essery to prevent skin sensitization and dermatitis.
pproved safety glasses with side shields, or	r goggles, should be worn.
IX SPECIAL I	PRECAUTIONS
ocalized exhaust and/or respiratory protecti	
ection II are exceeded.	
se good housekeeping practices to prevent ac	ccumulation of dust and fumes and keep airborne
ust and fumes level below PEL and TLV levels	
ll information, recommendations and suggesti	ions contained herein are based upon data believed
a he correct However no distantee of wary	canty of any kind, expressed or implied, is made by
imonds Cutting Tools with respect to the inf	ancy of any kind, expressed of implied, is made by
monds cuccing loois with issherr to the ini	cormacion provided.
molement should use this information only as	
apioyers should use this information only as	a supplement to other available data. Since the
se of these products is beyond our control,	it is each user's, and the employer of the user's
esponsibility to assure the safety and healt	h of the users. Simonds Cutting Tools will not
ssume liability arising out of the use of th	ese products by others.
WARNING LABEL	
	hole saws, hacksaw blades, bits & shanks contain
e following substances: Chromium, cobalt,	nickel, and vanadium.
ad Material Safety Data Sheets before cutti	ng, grinding, or welding.
Avoid breathing dust or mist.	
Avoid prolonged skin contact with dust or m	íst.
Use adequate ventilation when grinding.	2
Maintain dust level below OSHA and ACGIH le	vels.
Use protective devices.	
Wash hands thoroughly before eating or smok	ing.
Dispose of materials according to local, sta	
	······································
Simonds Cut	tting Tools
100 Interv	
Fitchburg,	
(617) 343-3	
	4 U 1 U
	()
	\checkmark

.

JIMI.