MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

MANUFACTURER'S NAME: SOMMA TOOL CO., INC.

109 SCOTT RD. - P.O. BOX 2559 WATERBURY, CT 06725-2559

TELEPHONE NO. (203) 753-2114

DATE PREPARED:

February 2007

TRADE NAME (Label Identity): 1020, 4130, 4150, 52100, MAX 3.5, INVAR 36, L6

CHEMICAL NAME (Generic):

FERROUS ALLOYS

COMMON NAME:

LOW CARBON & ALLOY STEELS

II. HAZARDOUS INGREDIENTS

The terms 'hazardous' and 'hazardous materials' as used within this MSDS should be interpreted as defined by, and in accordance with, the OSHA Hazard Communication Standard (29 CFR Part 1910, 1200) including cited Appendices, Lists, References, etc., all of which are hereby incorporated by reference.

MATERIAL or COMPONENT	CAS NO.	OSHA PEL (Mg/M ³⁾	ACGIH TLV (Mg/M³)	% BY WEIGHT
***ALUMINUM(t)	7429-90-5 (Fume)	5	√5.0	< 2%
BISMUTH	7440-69-9			< 1%
CARBON	1333-86-4	3.5	3.5	< 3%
***CHROMIUM	7440-47-3	1.0	,5 0	·<18%
***COBALT	7440-48-4	.05	.05	0 - 5%
COLUMBIUM	7440-03-1 (Dust)	15	10	< 1%
***COPPER	7440-50-8 (Fume)	0.1	0.2	0 - 1%
IRON	1309-37-1	. 10	, 5	62 - 99.6%
***LEAD	7439-92-1	.05	.15	< 1%
***MANGANESE	7439-96-5 (Dust)	5	. 5	< 3%
•	(Fume)	. 1 .	1	
MOLYBDENUM	7439-98-7	10	10	0 - 10%
***NICKEL	7440-02-0	1 .	1	0 - 36%
PHOSPHOROUS	7723-14-0	0.1	0.1	< 1%
SELENIUM COMPOUNDS	7782-49-2	0.2	0.2	< 2%
SILICON	7440-21-2 (Dust)	10	. 10	< 5%
SULFUR	7704-34-9	13.0	5.0	< 1%
TITANIUM	13463-67-7	· 10 ·	: 10	< .1%
TUNGSTEN	7440-33-7	5	5	< 11%
***VANADIUM (†)	1314-62-1 (Dust) (Fume)	.05 (Ceiling) .05 (Ceiling)	.05	<18%
•	(i dillo)	.55 (0011119)		

^{***} Signifies that this chemical is present in high enough concentrations to become subject to the reporting requirements of section 313 of the Emergency Planning and the Community Right-to-Know Act of 1986, 40 CFR 372. • (f) Denotes that this chemical is considered to be hazardous only as a fume or dust.

	III. PHYS	ICAL DATA	
BOILING POINT:	5000°F	MELTING POINT:	Approx. 2500"I
SPECIFIC GRAVITY (H,O=1): VAPOR DENSITY (AIR=1):	Approx. 7.8-8.2 (60°F)	VAPOR PRESSURE:	N/A
% VOLATILES BY VOLUME:	N/A N/A	SOLUBILITY IN H,O: EVAPORATION (BUTYL ACETATE = 1):	Insoluble N/A
APPEARANCE & ODOR:	Various Shapes, Solid, Odo		
	IV. FIRE AND E	XPLOSION DATA	
FLASH POINT:	None	FIRE POINT:	None
	V. HEALTH HAZA	ARD INFORMATION	

WE DO NOT CONSIDER THIS PRODUCT IN THE FORM IT IS SOLD TO CONSTITUTE A PHYSICAL HAZARD OR A HEALTH HAZARD. SUBSEQUENT OPERATIONS SUCH AS ABRADING, MELTING, WELDING, CUTTING OR PROCESSING IN ANY OTHER FASHION MAY PRODUCE POTENTIALLY HAZARDOUS DUST OR FUME WHICH CAN BE INHALED, SWALLOWED. OR COME IN CONTACT WITH THE SKIN OR EYES.

PRIMARY ROUTES OF ENTRY: Inhalation

EMERGENCY FIRST AID: Remove to fresh air; if condition continues, consult physician.

Eye Contact

Flush well with running water to remove

Skin Contact

particulate. Get medical attention. Brush off excess dust. Wash area well with

Ingestion

soap & water.

Seek medical help if large quantities of material have been ingested.

EFFECTS OF EXPOSURE: No toxic effects would be expected from exposure to the solid form of specialty steel. Prolonged, repeated exposure to fumes or dusts generated during heating, cutting, brazing or welding may or may not cause adverse health effects associated with the listed constitutents in excess of OSHA permissible exposure limits established in 29 CFR Subpart Z. (See Section II).

V. HEALTH HAZARD INFORMATION (CONT'D)

EXPOSURE LIMITS: Section II lists specific ingredients and permissible exposure limits.

IMPORTANT: Determine actual exposure by industrial hygiene monitoring.

POSSIBLE SIGNS AND SYMPTOMS OF EXPOSURE TO DUST, WELDING FUME AND GASES:

SHORT-TERM EXPOSURE: Metallic taste; nausea, tightness of chest; fever; irritation of eyes, nose, throat and skin; loss of

consciousness/death due to welding gases or lack of oxygen.

LONG-TERM EXPOSURE: There are no adverse effects from the products in their solid form. Adverse effects may or may not

result from long-term (chronic) exposure to dust, fume, gases, etc. that occur by way of subsequent operations on the product. Some studies would associate one (or more) of the constituents (per Section II) with the potential for neurologic, pulmonary, respiratory, skin or other disease. Chromium, cobalt and nickel in various chemical compounds have been identified as suspect human carcinogens by the I.A.R.C., N.T.P. Annual Report. We believe there are no reliable scientific studies which show that workers exposed to operations upon our alloys suffer increased incidence of lung cancer or other disease because of their exposure to the forms of chromium, nickel or other elements in

our products.

AGGRAVATION OF PREEXISTING RESPIRATORY OR ALLERGIC CONDITIONS MAY OCCUR IN SOME WORKERS.

VI. REACTIVITY DATA

STABILITY:

Chemically Stable

INCOMPATIBILITY:

Reacts with Strong Acids to Generate Hydrogen Gas

HAZARDOUS DECOMPOSITION PRODUCTS: Metallic Oxides

VII. SPILL OR LEAK PROCEDURES

N/A

STEPS TO BE TAKEN IN CASE OF RELEASE OR SPILL:

WASTE DISPOSAL METHOD:

Solids - Save as Scrap for Reuse

Dust, etc. - Follow Federal, State and Local

Regulations Regarding Disposal

VIII. SPECIAL PROTECTION INFORMATION

VENTILATION REQUIREMENTS:

General - Recommended

(To keep airborne concentration of dust and fumes below ACGIH TLV'S)

Local - As Required

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory Protection:

If fumes, misting or dust condition occurs and T.L.V. as indicated in Section II is

exceeded, provide NIOSH approved respirators.

Eye Protection:

Recommend approved safety glasses or goggles when working with dusty material.

Gloves:

As Required

Other Clothing or Equipment:

As Required

IX. SPECIAL PRECAUTIONS

USE GOOD HOUSEKEEPING PRACTICES TO PREVENT ACCUMULATIONS OF DUSTS AND TO KEEP AIRBORNE DUST CONCENTRATIONS AT A MINIMUM.

THIS MATERIAL IS POTENTIALLY CONTAMINATED WITH COATINGS SUCH AS OILS FOR PRESERVATIVES AND OTHER CONTAMINANTS. IF THE MATERIAL IS CONTAMINATED, SPECIAL PRECAUTIONS (SUCH AS PROCESS CONTROL AND PERSONAL PROTECTIVE EQUIPMENT APPROPRIATE TO THE NATURE OF THE SUSPECTED CONTAMINANTS SHOULD BE TAKEN TO AVOID RESULTING EXPOSURES WHEN HANDLING, CUTTING (THERMAL OR MECHANICAL) AND/OR HEATING OR MELTING.

While the information set forth on this material safety data sheet is believed to be accurate, as of the effective date, Somma Tool Co. makes no representations regarding the accuracy or completeness of the information and assumes no liability for any loss, damage, or injury of any kind which may result from or arise out of the use or reliance on the information by any person.

N/A = NOT APPLICABLE

California Safe Drinking Water Act (Prop 65) listing:

CHEMICAL CAS NUMBER
NICKEL 7440-02-0
COBALT 7440-48-4
LEAD 7439-92-1