MATERIAL SAFETY DATA SHEET

SPEC/MSDS NUMBER	DATE
5841	7/10/2013

(REVIEW DATE: 01/18/13)

PRODUCT IDENTIFICATION

TRADE NAME LINOTYPE	GENERIC NAME LINOTYPE
MANUFACTURER'S NAME BELMONT METALS INC.	CAS NUMBER SEE BELOW
ADDRESS (STREET) 330 BELMONT AVE.	PHONE NUMBER (EMERGENCY) 718-342-4900
CITY / STATE / ZIP BROOKLYN, NEW YORK 11207	CHEMICAL STRUCTURE

I • *PRODUCT INGREDIENTS*

CHEMICAL AND/OR COMMON NAME	CAS NUMBER	%	TLV mg/m³	PEL mg/m³
*ANTIMONY	7440-36-0	12.0	0.5	0.5
*COPPER	7440-50-8	.10 MAX.	1.0-dust&mists 0.2-fume	1.0-dust 0.1-fume
TIN	7440-31-5	4.0	2.0-inorganics except as oxides	2.0-inorganics except as oxides
	7439-89-6	.10 MAX.	SEE OXIDE	SEE OXIDE
IRON OXIDE	1309-37-1		5.0-fume	10.0-dust & fume
*LEAD	7439-92-1	83.9	0.15	0.05
*ARSENIC	7440-38-2	.35 MAX.	0.1	0.01

II • *PHYSICAL DATA*

BOILING POINT	VAPOR PRESSURE	MELTING POINT	
NOT APPLICABLE	NOT APPLICABLE	463° F.	
SOLUBILITY IN WATER	VAPOR DENSITY (AIR=1)	PERCENT VOLATILE	EVAPORATION RATE (=1)
NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE

APPEARANCE AND ODOR
GRAY METALLIC – NO ODOR

III • *FIRE AND EXPLOSION DATA*

FLASH POINT	FLAMMABLE LIMITS	LEL	UEL
NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE

EXTINGUISHING MEDIA SAND, DRY CHEMICAL, OR CO_2 SHOULD BE USED ON SURROUNDING FIRE. DO NOT USE WATER ON FIRE WHERE MOLTEN METAL IS PRESENT.

SPECIAL FIREFIGHTING PROCEDURES USE FULL BODY PROTECTIVE CLOTHING AND FULL FACE PIECE, SELF CONTAINED BREATHING APPARATUS OPERATED ON POSITIVE PRESSURE MODE.

UNUSUAL FIRE OR EXPLOSION HAZARDS MOLTEN METALS PRODUCE FUME, VAPOR, AND OR DUST THAT MAY BE TOXIC AND/OR RESPIRATORY IRRITANTS. METAL REACTS WITH OXIDIZING AGENTS.

IV • *HEALTH HAZARD INFORMATION*

HAZARD BY ROUTES OF EXPOSURE (Indicate chronic and acute)

INHALATION VAPOR AND/OR FUME MAY BE IRRITATING TO THE RESPIRATORY SYSTEM AND CAN RESULT IN BOTH ACUTE AND CHRONIC OVEREXPOSURE.

INGESTION DUST VAPOR AND/OR FUME MAY BE ABSORBED BY THE DIGESTIVE SYSTEM AND CAN RESULT IN BOTH ACUTE AND CHRONIC OVER EXPOSURE

EYE
DUST VAPOR AND/OR FUME MAY CAUSE IRRITATION

SKIN CONTACT/ABSORPTION
DUST VAPOR AND/OR FUME MAY CAUSE IRRITATION

SIGNS AND SYMPTOMS ASSOCIATED WITH EXPOSURE OVER TLV
SEE ATTACHED

MEDICAL CONDITIONS WHICH MAY BE AGGRAVATED
NOT APPLICABLE

ANY PART LISTED AS CARCINOGENS (NTP,IARC,OSHA)
SEE SECTION X

HEALTH HAZARD INFORMATION CONTINUED ON PAGE 2

V • *HEALTH HAZARD INFORMATION (Continued)*

EMERGENCY/FIRST AID PROCEDURES

INHALATION
REMOVE FROM EXPOSURE. GET MEDICAL ATTENTION

INGESTION
GET IMMEDIATE MEDICAL ATTENTION

EYE CONTACT
FLUSH WITH COPIOUS QUANTITIES OF WATER, GET MEDICAL ATTENTION IMMEDIATELY

SKIN CONTACT
WASH THOROUGHLY WITH SOAP AND WATER

SKIN ABSORPTION
NOT APPLICABLE

VI • *CONDITIONS FOR SAFE USE (When over TLV)*

RESPIRATORY PROTECTION
NIOSH/MSHA APPROVED RESPIRATOR FOR TOXIC DUST AND OR FUME

EYE PROTECTION
FACE SHIELD OR VENTED GOGGLES SHOULD BE WORN

PROTECTIVE GLOVES
GLOVES SHOULD BE WORN WHEN HANDLING THIS PRODUCT

OTHER PROTECTIVE CLOTHING/EQUIPMENT FULL PROTECTIVE CLOTHING (COVERALLS) SHOULD BE WORN DURING PRODUCT USE AND PROPERLY LAUNDERED AFTER USE

VENTILATION REQUIREMENTS
LOCAL VENTILATION RECOMMENDED – REQUIRED IF THRESHOLD LIMITS ARE EXCEEDED

VII • *REACTIVITY DATA*

IS MATERIAL STABLE?	WILL HAZARDOUS POLYMERIZATION OCCUR
YES	NO
INCOMPATIBILITY	**CONDITIONS TO AVOID**
STRONG OXIDIZERS MAY CAUSE A VIOLENT REACTION	NOT APPLICABLE

HAZARDOUS DECOMPOSITION PRODUCTS
AT TEMPERATURES ABOVE MELTING POINT TOXIC FUMES OR VAPORS MAY BE EMITTED

VIII • *SPILL OR LEAK PROCEDURES*

STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED MATERIAL SHOULD BE VACUUMED OR WET SWEPT WHEN VACUUMING IS NOT FEASIBLE – PARTICULATE MATTER SHOULD BE STORED IN DRY CONTAINERS FOR LATER DISPOSAL. DO NOT USE COMPRESSED AIR AS A MEANS OF CLEANING.

WASTE DISPOSAL METHOD DISPOSE OF TOXIC SUBSTANCES AND HAZARDOUS WASTE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

RCRA REGULATED	RCRA NUMBER	CERCULA (Superfund) REPORTABLE QUANTITY	
NO	NOT APPLICABLE	NOT APPLICABLE	
DOT REGULATED	**DOT PROPER SHIPPING NAME**	**DOT HAZARD CLASS**	**DOT NUMBER**
NO	NOT APPLICABLE	NOT APPLICABLE	NOT APPLICABLE

IX • *SPECIAL PRECAUTIONS*

SPECIAL PRECAUTIONS FOR HANDLING AND STORAGE SIGNS & LABELS IN WORK AREAS AND FOR CONTAMINATED CONTAINERS OR EQUIPMENT MAY BE REQUIRED UNDER OSHA REGULATIONS. MEDICAL EXAMINATIONS, MONITORING, RECORD KEEPING AND HYGIENE FACILITIES AND PRACTICES SPECIFIED BY OSHA MAY HAVE TO BE MET. EMPLOYEE TRAINING PROGRAM MAY ALSO BE REQUIRED.

OTHER PRECAUTIONS PRACTICE GOOD HOUSEKEEPING & PERSONAL HYGIENE PROCEDURES. NO TOBACCO, OR FOOD IN WORK AREA. WASH THOROUGHLY BEFORE EATING OR SMOKING. AVOID INGESTION OR INHALATION. TAKE A SHOWER AND CHANGE CLOTHES AT END OF SHIFT. DO NOT WEAR CONTAMINATED CLOTHING HOME. DO NOT USE COMPRESSED AIR ON CLOTHING.

PREPARED BY	TELEPHONE NO.	TITLE
HERB DOYLE	718-342-4900	SALES MANAGER

While the information and recommendations set forth herein are believed to be accurate as of the date hereof, THE MANUFACTURER MAKES NO WARRANTY WITH RESPECT THERETO, AND DISCLAIMS ALL LIABILITY FROM RELIANCE THEREON.

X HEALTH HAZARD DATA

OVER HEATING OF ALLOY CAN PRODUCE METAL FUMES A ND OXIDES. MACHINING OPERATIONS SUCH AS GRINDING, SAWING, BUFFING CAN GENERATE AIRBORNE PARTICULATE IN THE WORK AREA. THE EXPOSURE LEVELS INDICATED IN SECTION II ARE RELEVANT TO THESE AND OTHER OPERATIONS.

FOLLOWING ARE SYMPTOMS OF OVER EXPOSURE TO THE VARIOUS INGREDIENTS:

***ANTIMONY**

ANTIMONY AND ITS COMPOUNDS ARE IRRITATING TO THE SKIN AND MUCOUS MEMBRANES AND ARE SYSTEMIC POISONS. EFFECTS ARE REPORTED TO INCLUDE A METALLIC TASTE IN THE MOUTH, VOMITING, COLIC, LOSS OF APPETITE AND WEIGHT, AND DIARRHEA. IN ADDITION, DERMATITIS MAY RESULT WHICH STARTS AS INFLAMMATION OF THE HAIR FOLLICLES AND CAN PROGRESS THROUGH PUS FORMATION AND SLOUGHING TO LEAVE A CONTRACTED SCAR.
CHRONIC INHALATION OF ANTIMONY TRIOXIDE IS REPORTED TO PRODUCE A REDUCTION IN WHITE BLOOD CELLS AND DAMAGE TO THE LIVER. ANTIMONY AND ITS COMPOUNDS HAVE BEEN IDENTIFIED AS SUSPECTED CANCER-CAUSING AGENTS.

***ARSENIC**

ARSENIC IS A CUMULATIVE POISON WHICH IS DEPOSITED IN THE LIVER, KIDNEYS, HAIR AND NAILS. INHALED ARSENIC IS EXCRETED THROUGH THE KIDNEYS AND CAN BE DETECTED IN THE URINE HOURS TO YEARS AFTER EXPOSURE. SYMPTOMS OF PERSONS WHO HANDLE SOLID ARSENIC COMPOUNDS ARE HUSKY VOICE, COUGH PERFORATION OF THE NASAL SEPTUM, ULCERATION OF THE SKIN, LOSS OF HAIR AND NAILS, WARTS AND SOMETIMES, SLOW, NON-MALIGNANT SKIN CANCERS.

***COPPER**

MELTING, GRINDING, and CUTTING OF COPPER MAY PRODUCE FUMES OR DUST EXPOSURE AND BREATHING THESE FUMES OR DUST MAY PRESENT POTENTIALLY SIGNIFICANT HEALTH HAZARDS. FUMES OF COPPER MAY CAUSE METAL FUME FEVER WITH FLU-LIKE SYMPTOMS AND SKIN AND HAIR DISCOLORATION. WHILE INDUSTRIAL DERMATITIS HAS NOT BEEN REPORTED, KERATINIZATION OF THE HANDS AND THE SOLES OF THE FEET HAS BEEN REPORTED. SYSTEMICALLY AS WELL, COPPER DUST AND FUME CAUSE IRRITATION OF THE UPPER RESPIRATORY TRACT, METALLIC TASTE IN THE MOUTH, AND NAUSEA. CHRONIC POISONING RESULTS IN WILSON'S DISEASE CHARACTERIZED BY A HEPATIC CIRRHOSIS, BRAIN DAMAGE, DENYELINATION, RENAL DISEASE AND COPPER DEPOSITION IN THE CORNEA.

IRON
THE INHALATION OF IRON OXIDE FUMES MAY CAUSE AN APPARENT BENIGN PNEUMOCONIOSIS WHICH IS CALLED SIDEROSIS. THIS DISEASE IS REPORTED NOT TO BE DISABLING, BUT MAKES X-RAY OF OTHER LUNG CONDITIONS DIFFICULT OR IMPOSSIBLE.

***LEAD**

SHORT TERM EXPOSURE- LEAD IS AN ACCUMULATIVE POISON. INHALATION EFFECTS OF EXPOSURE TO FUMES OR DUST OF INORGANIC LEAD MAY NOT DEVELOP QUICKLY. SYMPTOMS MAY INCLUDE DECREASED PHYSICAL FITNESS, FATIGUE, SLEEP DISTURBANCE, HEADACHE, ACHING BONES AND MUSCLES, CONSTIPATION, ABDOMINAL PAINS, AND DECREASING APPETITE. THE EFFECTS ARE REVERSIBLE AND COMPLETE RECOVERY IS POSSIBLE. INHALATION OF LARGE AMOUNTS OF LEAD MAY LEAD TO SEIZURES, COMA, AND DEATH.

***LEAD**

LONG TERM EXPOSURE-LONG TERM EXPOSURE CAN RESULT IN BUILDUP OF LEAD IN THE BODY AND MORE SEVERE SYMPTOMS. THESE MAY INCLUDE ANEMIA, PALE SKIN, A BLUE LINE AT THE GUM MARGIN, DECREASED HANDGRIP STRENGTH, ABDOMINAL PAIN SEVERE CONSTIPATION, NAUSEA, VOMITING, AND PARALYSIS OF THE WRIST JOINT. PROLONGED EXPOSURE MAY ALSO RESULT IN KIDNEY DAMAGE. IF THE NERVOUS SYSTEM IS AFFECTED, USUALLY DUE TO VERY HIGH EXPOSURES, THE RESULTING EFFECTS INCLUDE SEVERE HEADACHE, CONVULSIONS, COMA, DELIRIUM, AND DEATH, ALCOHOL INGESTION AND PHYSICAL EXERTION MAY BRING ON SYMPTOMS. CONTINUED EXPOSURE CAN RESULT IN DECREASED FERTILITY AND/OR INCREASED CHANCES OF MISCARRIAGE OR BIRTH DEFECTS.

X HEALTH HAZARD DATA [CONTINUED]

TIN

THE INHALATION OF INORGANIC TIN FUMES OR DUST MAY CAUSE AN APPARENT BENIGN PNEUMOCONIOSIS CALLED STANNOSIS, WHICH IS REPORTED NOT TO BE DISABLING.

XI SPECIAL INSTRUCTIONS FOR CHEMICALS MARKED WITH AN ASTERISK (*)

THOSE CHEMICALS MARKED WITH AND ASTERISK (*) ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENT AND REAUTHORIZATION ACT OF 1986 IN 40 CFR PART 372.

THIS INFORMATION IS TAKEN FROM SOURCES BELIEVED TO BE RELIABLE; HOWEVER, THE MANUFACTURER MAKES NO WARRANTY AS TO THE ABSOLUTE CORRECTNESS OR SUFFICIENCY OR ANY OF THE FOREGOING OR THAT ADDITIONAL OR OTHER MEASURES MAY BE REQUIRED UNDER PARTICULAR CONDITIONS.

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