CERRO METAL PRODUCTS
A Division of The Marmon Group, Inc.

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814-355-6357

Folder

WADE S. NEMITH
PRODUCT MANAGER - LOW MELT ALLOYS

A member of The Marmon Group of companies

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U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

DPM 163

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME: CERRO METAL PRODUCTS	EMERGENCY TELEPHONE NO.: 814-355-6357
ADDRESS (Number, Street, City, State, and ZIP Code): P. O. Box 388, Bellefonte, Pennsylvania 16823	
CHEMICAL NAME AND SYNONYMS:	TRADE NAME AND SYNONYMS: Cerrobend
CHEMICAL FAMILY: Fusible Alloy.	FORMULA: Bi-50.0%; Pb-26.7%; Sn-13.3%; Cd-10.0%

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS		%	TLV (Units)
PIGMENTS			BASE METAL Lead	Pb	26.7	.05
CATALYST			ALLOYS Cerrobend	Sn	13.3	.5
VEHICLE			METALLIC COATINGS Cadmium	Cd	10.0	.1 cd fume
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX			
ADDITIVES			OTHERS			
OTHERS						

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)	Unknown	SPECIFIC GRAVITY (H_2O=1)	9.4 Apx.
VAPOR PRESSURE (mm Hg.)	Unknown	PERCENT, VOLATILE BY VOLUME (%)	NA
VAPOR DENSITY (AIR=1)	NA	EVAPORATION RATE (_____ =1)	NA
SOLUBILITY IN WATER	Insol.	Melting Point	158° F
APPEARANCE AND ODOR	Solid gray metal - odorless		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

(Continued on reverse side)

Form OSHA-20

BOE-C6-0208406

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE: Cdfume - 0.1 mg/m^3; Sn-0.1 mg/m^3; Pb - 0.05 mg/m^3

EFFECTS OF OVEREXPOSURE: Not known.

EMERGENCY AND FIRST AID PROCEDURES: In case of burns while handling molten metal, treat as you would a burn from hot grease. If ingestion or inhalation is suspected due to overheating of alloy, consult a physician.

SECTION VI - REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		Avoid overheating to prevent formation of oxides.
	STABLE	X	

INCOMPATABILITY (Materials to avoid): Avoid contact of water with molten alloy.

HAZARDOUS DECOMPOSITION PRODUCTS:

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	X	

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Clean up spills of molten metal immediately to minimize dispersion.

WASTE DISPOSAL METHOD: Metal drosses or residues to be disposed of at an approved landfill in compliance with federal, state and local regulations after removal of usable metals.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (Specify type): NIOSH approved respirator in spraying applications.

VENTILATION			
	LOCAL EXHAUST: Spray applications.	SPECIAL: Temperature control of melting pots.	
	MECHANICAL (General):	OTHER: Safety goggles when handling molten alloys.	

PROTECTIVE GLOVES: Heat resistant gloves when handling molten alloys.

EYE PROTECTION:

OTHER PROTECTIVE EQUIPMENT:

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Workers should wash hands prior to eating or smoking as a matter of good personal hygiene to prevent possible ingestion of metals.

OTHER PRECAUTIONS:

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MCDONNELL DOUGLAS CORPORATION

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U.S. DEPARTMENT OF LABOR
WORKPLACE STANDARDS ADMINISTRATION
BUREAU OF LABOR STANDARDS

FORM NO OSHA-20 (MODIFIED)
MAY 1971

MATERIAL SAFETY DATA SHEET

MDC CONTROL NO. DPM 163

SECTION I: MATERIAL AND MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: ARCONIUM CORP. OF AMERICA

EMERGENCY TELEPHONE NO.: ~~401 421 8467~~ 401-456-0800

ADDRESS (NUMBER, STREET, CITY, STATE AND ZIP CODE): 50 SIMS AVENUE, PROVIDENCE, RI 02909

CHEMICAL NAME AND SYNONYMS:

TRADE NAME AND SYNONYMS: OSTALLOY 158, No. 5000-7

CHEMICAL FAMILY: FUSIBLE ALLOY

FORMULA: Bi 50.0, Pb 26.7, Sn 13.3, CD 10.0%

SECTION II: HAZARDOUS INGREDIENTS*

PAINTS, PRESERVATIVES/SOLVENTS	%	TLV (UNITS)	ALLOYS AND METALLIC COATINGS	%	TLV (UNITS)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES*		%	TLV (UNITS) Mg/m³
ALLOY CONTAINING	LEAD	26.7	0.05
	CADMIUM	10	0.1

SECTION III: PHYSICAL DATA

BOILING POINT (°F)	2000	SPECIFIC GRAVITY (H_2O = 1)	9.38
VAPOR PRESSURE (mm Hg.) AT 158°F	10^{-5}	PERCENT VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR = 1)		EVAPORATION RATE (_____ = 1)	0
SOLUBILITY IN WATER	INSOLUBLE		

APPEARANCE AND ODOR: METALLIC, ODORLESS

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED): NON-FLAMMABLE

FLAMMABLE LIMITS: Lel | Uel

EXTINGUISHING MEDIA

SPECIAL FIRE FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARDS

*PLEASE DO NOT USE GENERALIZATIONS, SUCH AS PETROLEUM HYDROCARBONS, ALCOHOL, KETONES. USE SPECIFIC CHEMICAL NAMES, SUCH AS METHANOL, BENZENE, PERCHLOROETHYLENE.

MDC 363(20 SEP 71)

SECTION V: HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

LEAD = 0.05 Mg/M³ CADMIUM = 0.1 Mg/M³

EFFECTS OF OVEREXPOSURE

Complex Biological Effects.

EMERGENCY AND FIRST AID PROCEDURES

SECTION VI: REACTIVITY DATA

STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE	X	

INCOMPATIBILITY (MATERIALS TO AVOID)

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR		

SECTION VII: SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Normal Solid Spillage Clean up Techniques.

WASTE DISPOSAL METHOD

Dispose of According to Local Toxic Waste Regulations or Return to Manufacturer for Disposal.

SECTION VIII: SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE)

Not Necessary up to 400°F

VENTILATION	LOCAL EXHAUST: Not Necessary up to 400°F	SPECIAL
	MECHANICAL (GENERAL)	OTHER

PROTECTIVE GLOVES: Recommended	EYE PROTECTION: Goggles

OTHER PROTECTIVE EQUIPMENT

SECTION IX: SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep Dry Before Melting.

Wash Hands Before Eating or Smoking

OTHER PRECAUTIONS

Use Care when Handling Molten Alloy - Danger of Burns

David M. Sklarski — PREPARED BY

May 13, 1982 — DATE