

POWDER ALLOY CORP -- PAC90C METAL ALLOY POWDER -- 3439-01-030-6128

=====  
Product Identification  
=====

Product ID:PAC90C METAL ALLOY POWDER

MSDS Date:01/29/1996

FSC:3439

NIIN:01-030-6128

MSDS Number: CCVSM

=== Responsible Party ===

Company Name:POWDER ALLOY CORP

Address:12036 COOPERWOOD LN

City:CINCINNATI

State:OH

ZIP:45242-6321

Country:US

Info Phone Num:513-984-4016

Emergency Phone Num:513-984-40

16

CAGE:56923

=== Contractor Identification ===

Company Name:POWDER ALLOY CORP

Address:12036 COOPERWOOD LN

Box:City:CINCINNATI

State:OH

ZIP:45242-6321

Country:US

Phone:513-984-4016

CAGE:56923

=====  
Composition/Information on Ingredients  
=====

Ingred Name:COBALT (SARA 313)

CAS:7440-48-4

RTECS #:GF8750000

Fraction by Wt: 44-64%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:0.1 MG/M3

ACGIH TLV:0.02 MG/M3; A3; 9596

Ingred Name:CHROMIUM (SARA 313) (CERCLA)

CAS:7440-47-3

RTECS #:GB42

00000

Fraction by Wt: 24-27%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH TLV:0.5 MG/M3; 9596

EPA Rpt Qty:1 LB

DOT Rpt Qty:1 LB

Ingred Name:NICKEL (SARA 313) (CERCLA)

CAS:7440-02-0

RTECS #:QR5950000

Fraction by Wt: 9-12%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:1 MG/M3

ACGIH TLV:1 MG/M3; 9596

Ingred Name:TUNGSTEN,AS W,SOLUBLE COMPOUNDS.

CAS:7440-33-7

RTECS #:YO7175000

Fraction by Wt: 7-9%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:NOE ESTABLISHED

ACGIH TLV:1 MG/M3/3 STEL; 9596

I

ngred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

Fraction by Wt: 0-2%

Other REC Limits:NONE RECOMMENDED

Ingred Name:MANGANESE (SARA 313)

CAS:7439-96-5

RTECS #:OO9275000

Fraction by Wt: 0-1%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:C, 5 MG/M3 (FUME)

ACGIH TLV:0.2 MG/M3; 9596

Ingred Name:SILICON

CAS:7440-21-3

RTECS #:VW0400000

Fraction by Wt: 0-1%

Other REC Limits:NONE RECOMMENDED

OSHA PEL:15 MG/M3 TDUST

ACGIH TLV:10 MG/M3 TDUST; 9596

=====  
===== Hazards Identification =====

=====

LD50 LC50 Mixture:NOT GIVEN FOR PRODUCT AS A WHOLE

Routes of Entry: Inhalation:YES Skin:YES Ingestion:NO

Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:SKIN CONTACT MAY CAUSE DERMATITIS. EYE CONTACT MAY CAUSE IRRITATION AND REDNESS. INHALATION MAY CAUSE IRRITATION TO UPPER RESPIRATORY TRACT. INGESTION MAY CAUSE NAUSEA, VOMITING AND DIARRHEA. CHRONIC SKIN CONTACT MAY LEAD TO LESIONS AND REDNESS. CHRONIC INHALATION MAY CAUSE FIBROTIC DISEASE.

Explanation of Carcinogenicity:THIS MATERIAL MAY CONTAIN NICKEL AND/OR CHROMIUM. CHROMIUM IS LISTED AS A HUMAN CARCINOGEN AND NICKEL IS PROBABLE.

Effects of Overexposure:DERMATITIS, EYE IRRITATION/REDNESS, UPPER RESPIRATORY TRACT IRRITATION, NAUSEA, VOMITING, DIARRHEA, LESIONS, SKIN REDNESS, FIBROTIC DISEASE.

Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

===== First Aid Measures =====

First Aid:EYES: FLU

SH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS

OPEN. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING.

WASH WITH SOAP AND WATER. IF IRRITATION PERSIST, GET MEDICAL

ATTENTION. INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. GET

MEDICAL ATTENTION. INGESTION: INDUCE VOMITING. CONSULT A PHYSICIAN.

===== Fire Fighting Measures =====

Flash Point:NONFLAMMABLE

Lower Limits:NOT GIVEN

Upper Limits:NOT GIVEN

Extinguishing Media:USE CLASS

"D" FIRE EXTINGUISHER

Fire Fighting Procedures:SELF CONTAINED BREATHING APPARATUS SHOULD BE WORN. COMPLY WITH NFPA51B STANDARD FOR FIRE PREVENTION IN THE USE OF CUTTING AND WELDING PROCESSES.

Unusual Fire/Explosion Hazard:MODERATE FIRE HAZARD IN THE FORM OF DUST OR ACCUMULATION OF SUCH. IN ADDITION, MINIMIZE AIRBORNE POWDER PARTICLES.

===== Accidental Release Measures =====

Spill Release Procedures:USE RESPIRATORY EQUIPMENT DURING CLEANUP. USE

E

EQUIPMENT THAT KEEPS MATERIAL FROM BECOMING AIRBORN. TO MINIMIZE DUST GENERATION, USE WET MOP, HEPA VACUUM.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

=====  
===== Handling and Storage =====

Handling and Storage Precautions:KEEP MATERIAL CONTAINERS CLOSED AND DRY DURING STORAGE. NO FOOD OR SMOKING IN WORK AREAS. WASH THOROUGHLY AFTER HANDLING.

Other Precautions:INSTALL EYE WASH STATIONS. HAVE SAFETY MANAGERS AND OPERATORS REVIEW "RECOMMENDED SAFE PRACTICES FOR THERMAL SPRAY" AWS PUBLICATION C2.1-73.

=====  
===== Exposure Controls/Personal Protection =====

Respiratory Protection:WEAR RESPIRATOR AS APPROVED BY NIOSH OR OSHA 1910.134 TO PROTECT OPERATOR FROM FUMES.

Ventilation:LOCAL EXHAUST AND MECHANICAL (GENERAL) VENTILATION AS REQUIRED TO MAINTAIN EXPOSURE LEVELS.

Protective Gloves:IMPERVIOUS

Eye Protection:PER OSHA 1910.3

Other Protective Equipment:CHEMICAL RESISTANT CLOTHING AS NECESSARY TO PREVENT SKIN CONTACT. AN EMERGENCY EYEWASH AND SHOWER SHOULD BE AVAILABLE.

Work Hygienic Practices:WASH HANDS THOROUGHLY WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES.

Supplemental Safety and Health

NONE SPECIFIED BY MANUFACTURER.

=====  
===== Physical/Chemical Properties =====

HCC:N1

Boiling Pt:B.P. Text:NOT GIVEN

Melt/Freeze Pt:M.P/F.P Text:NOT GIVEN

Vapor Pres:NOT GIVEN

Vapor Density:NOT GIVEN

Spec Gravity:NOT GIVEN

Evaporation Rate &

Reference:NOT GIVEN

Solubility in Water:INSOLUBLE

Appearance and Odor:GRAY METALLIC POWDER WITH NO APPRECIABLE ODOR

Percent Volatiles by Volume:NIL

===== Stability and Reactivity Data =====

Stability Indicator/Materials to Avoid:YES

NONE SPECIFIED BY MANUFACTURER.

Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.

Hazardous Decomposition Products:OZONE AND NITRIC OXIDE ARE FORMED  
DURING SPRAYING.

===== Disposal Considerations =====

=====

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING  
ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR  
LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

Disclaimer (provided with this information by the compiling agencies):

This information is formulated for use by elements of the Department  
of Defense. The United States of America in no manner whatsoever,  
expressly or implied, warrants this information to be accurate and

disclaims all liability for its use. Any person utilizing this  
document should seek competent professional advice to verify and  
assume responsibility for the suitability of this information to their  
particular situation.