

METCO INC, SUB OF THE PERKIN-ELMER CORP -- METCO 301NS, BORON NITRIDE CERMET POWDER -- 3439-01-380-4104

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

Product ID:METCO 301NS, BORON NITRIDE CERMET POWDER
MSDS Date:04/26/1993
FSC:3439
NIIN:01-380-4104
MSDS Number: BYSGP
=== Responsible Party ===
Company Name:METCO INC, SUB OF THE PERKIN-ELMER CORP
Address:1101 PROSPECT AVENUE
City:WESTBURY
State:NY
ZIP:11590-27
24
Country:US
Info Phone Num:516-334-1300
Emergency Phone Num:202-483-7616/800-424-9300(CHEMTREC)
CAGE:39918
=== Contractor Identification ===
Company Name:METCO INC, SUB OF THE PERKIN-ELMER CORP
Address:1101 PROSPECT AVENUE
Box:City:WESTBURY
State:NY
ZIP:11590-2724
Country:US
Phone:516-334-1300
CAGE:39918

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

Ingred Name:ALUMINUM (SARA 313)
CAS:7429-90-5
RTECS #:BD0330000
Fraction by Wt: 3.5%
Other REC Limits:NONE RECOMMENDED
OS

HA PEL:15 MG/M3 DUST
ACGIH TLV:10 MG/M3 DUST; 9495

Ingred Name:BORON NITRIDE
CAS:10043-11-5
Fraction by Wt: 5.5%
Other REC Limits:NONE RECOMMENDED

Ingred Name:SILICA GEL (SILICON DIOXIDE)
CAS:112945-52-5
RTECS #:VV7310000
Fraction by Wt: 1.0%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:6 MG/M3
ACGIH TLV:10 MG/M3

Ingred Name:CHROMIUM (SARA 313) (CERCLA)
CAS:7440-47-3
RTECS #:GB4200000
Fraction by Wt: 14.0%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:1 MG/M3
ACGIH TLV:0.5 MG/M3; 9495
EPA Rpt Qty:
1 LB
DOT Rpt Qty:1 LB

Ingred Name:IRON
CAS:7439-89-6
RTECS #:NO4565500
Fraction by Wt: 8.0%
Other REC Limits:NONE RECOMMENDED

Ingred Name:NICKEL (SARA 313) (CERCLA)
CAS:7440-02-0
RTECS #:QR5950000
Fraction by Wt: 65.0%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9495

Ingred Name:ORGANIC BINDER
Fraction by Wt: 3.0%
Other REC Limits:NONE RECOMMENDED

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

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO
Health Hazards Acute and Chronic:AL:PNEUMOCOIOSIS.PULM/SKIN/EYE IRRIT
FRM ABRASIVE ACTION.UNDER NORMAL USE/CONDITIONS AL2O3 FORM.BN:IRRIT
RESP TRACT AS NUISANCE DUST.ALSO IRRIT EYE FRM MECHANICAL
IRRIT.INGRED INERT/NONTOXIC.SIO2:IRRI T LUNG/EYE.SILICOSIS,PULM
FIBROSIS(FIBROTIC CHANGES ON XRAY EXAM,SHORTNESS OF
BREATH,COUGH,DECR CHEST EXPAN,LESS(SUPPLE)

Explanation

of Carcinogenicity:PER MSDS:CONTAINS NICKEL POTENTIAL
CARCINOGEN IN IARC & LISTED IN NTP & HEXAVALENT CHROMIUM FRM
THERMAL SPRAY PROCESS.

Effects of Overexposure:EYE IRRIT, POSSIBLE DERMATITIS, INHLA IRRIT,
PNEUMOCONIOSIS, POSSIBLE INGEST IRRIT. REPEATED ORG BINDER INHAL &
SKIN CONTACT MAY CAUSE LIVER, KIDNEY DMG, RESP & SKIN
SENSITIZATION.

Medical Cond Aggravated by Exposure:CONSULT A PHYSICIAN. TARGET
ORGANS:LUNGS,SKIN,EYES,RESP TRACT,LIVER,KIDNEYS.

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

First Aid:EYE:FLUSH W/SUFFICIENT AMTS OF WATER.IF IRRIT PERSISTS
CONSULT PHYSICIAN. SKIN:WASH W/SOAP/WATER. INHAL:EXPOSE TO FRESH
AIR.CONSULT PHYSICIAN IF IRRIT OR RESPIRATORY DISTRESS PERSISTS.
INGEST:CONSULT PHYSICIAN.

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

Flash Point:NONE

Extinguishing Media:USE CLASS D EXTINGUISHERS.

Fire Fighting Procedures:TREAT AS METALLIC FIRE.

Unusual Fire/Explosion Hazard:

FINE METAL DUSTS FLAMM;MAY EXPLO WHEN
EXPO TO HEAT/FLAME/OXIDIZERS.ALUMINUM FLAMM SOLID;DO NOT EXPO TO
WATER/MOISTURE.CR/FE IGN IF AIRBORNE W/IGN SOURCE.(SUPPL)

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

Spill Release Procedures:VACUUM LOOSE POWDER ONLY W/VACUUMS EQUIPPED
W/HEPA FILTRATION. VACUUMS APPROPRIATE FOR USE W/METALLIC DUST
SHOULD BE UTILIZED. WIPE AREA CLEAN. DO NOT USE WATER FOR CLEAN UP
OPERATIONS. DO NOT SWEEP. AVOID GENERATING AIRBOR

NE DUST.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE AWAY FROM INCOMPATIBLES.STORE
PROD CONTNRS IN WELL-VENTI,CLEAN,COOL,DRY AREA.STORE IN MANNER TO
MINIMIZE PUNCTURES/BREAKAGE OF CNTNRS.

Other Precautions:AVOID INGEST/INHAL/EXCESSIVE SKIN CONTACT.AVOID
CONTACT OF POWDER W/WATER/OXIDIZERS.GOGG:COMBUST SPRAY
SHADE#5,PLASMA SPRAY UP TO 40KW SHADE#9,40-60KW SHADE#10,>6

0KW

SHADE#11.GOGG MAY BE APPROPRIATE D URING OTHER PHASES OF PROD
HNDLG.

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

Respiratory Protection:RESPIRATOR APPROVED BY NIOSH W/FILTER CARTRIDGES
APPROVED FOR DUST/FUME/MISTS SHOULD BE WORN AT ALL TIMES DURING
THERMAL SPRAY PROCESS TO PROTECT OPERATOR FROM EXPO TO
DUST/FUMES.RESP MAY ALSO BE WORN WHEN PRODUCT HDNGL GENERATES
DUST.

Ventilation:PRODUCT SHOULD BE USED W/APPROPRIATE LOCAL EXHAUST
VENTIL

ATION PROVIDED.

Protective Gloves:ALUMINIZED GLOVE-PLASMA SPRAY,RUBB-OTHER

Eye Protection:(SEE OTHER PRECAUTION SECITON OF MSDS.)

Other Protective Equipment:EAR PROT-EXCESS NOISE LEVELS.AL APRON-PLASMA
SPRAY PROCESS.OTHER APPRO PROT CLOTH AS NECESSARY,EYEWASH
STATION,WASH FACI

Work Hygienic Practices:WASH HANDS AFTER HANLDING.

Supplemental Safety and Health

FIRE/EXPLO HAZ:ORGBINDER BURN/HI TEMP PROD CO/PHENOL. HAZ DECOMP
PROD:HAZ DECOMP PROD FOR BN:CO2,CO,ALCOHOL VAP. HEALTH HAZ:WORK

CAPACITY,INCR SUSCEPT TO TUBERBULOSIS.CR:PNEUMOCONIOSIS,MUC MEMB
IRRIT/ ULCER,DERM/SENS/CR LESIONS.BRONCHOGENIC,LUN/STOMACHE
CANC.FE:SIDEROSIS.NI:CANC.ORGBINDER:IRRIT,BURN SENS,CONVUL,PULMEDEM

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

HCC:V7

Spec Gravity:4.0

Solubility in Water:NEGATIVE.

Appearance and Odor:POWDER, NO ODOR.

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

Stability Indicator/Materials to Avoid:YES

OXIDIZERS,ACIDS,SUL

FUR,NI(NO3)2,COMBUSTIBLES.ORG BINDER IMCOMPATIBLE
W/ACIDS,BASES,ALDEHYDES,HALOGENS,STRONG OXIDIZERS.
Stability Condition to Avoid:NONE SPECIFIED BY MANUFACTURER.
Hazardous Decomposition Products:OZONE & NITRIC ACID FORMED BY PLASMA
FLAME(SIMILAR TO WELDING FUMES).THIS ACTION INDEPENDENT OF
POWDER.(SUPPLEMENTAL)

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

Waste Disposal Methods:EMPTY PRODUCT CNTNRS/PROD WASTE/CLEANING MEDIA
SHOULD BE STORED & DISPOSE OF A
CCORDING TO APPROPRIATE
LOC/STATE/FED REGULATORY GUIDELINES.

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