

METCO/DIVISION OF PERKIN ELMER -- METCO 461 -- 3439-01-373-5884

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

Product ID:METCO 461

MSDS Date:01/18/1988

FSC:3439

NIIN:01-373-5884

MSDS Number: BLQGX

=== Responsible Party ===

Company Name:METCO/DIVISION OF PERKIN ELMER

Address:1101 PROSPECT AVENUE

City:WESTBURY

State:NY

ZIP:11590-2724

Info Phone Num:(516) 334-1300

Emergency Phone Num:(516) 334-1300

CAGE:NO538

=== 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

Company Name:METCO/DIVISION OF PERKIN ELMER

Address:1101 PROSPECT AVENUE

City:WESTBURY

State:NY

ZIP:11590-2724

Phone:(516) 334-1300

CAGE:NO538

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

Ingred Name:ALUMINUM (SARA III)

CAS:7429-90-5

RTECS #:BD0330000

OSHA PEL:15MG/M3 DUST/5 FUME

ACGIH TLV:10MG/M3 DUST; 9192

Ingred Name:COBALT (SARA II)

I)
CAS:7440-48-4
RTECS #:GF8750000
Other REC Limits:0.05 PPM
OSHA PEL:0.1 MG/M3;AS CO
ACGIH TLV:0.05 MG/M3;DUST 9293

Ingred Name:YTTRIA
CAS:1314-36-9
RTECS #:ZG3850000
OSHA PEL:1 MG/CUM
ACGIH TLV:1 MG/CUM

Ingred Name:SILICON
CAS:7440-21-3
RTECS #:VW0400000
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9293

Ingred Name:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
OSHA PEL:(C) 5 MG/M3 DUST
ACGIH TLV:5 MG/M3 DUST 9293

Ingred Name:CHROMIUM (SARA III)
CAS:7440-47-3
RTECS #:GB4200000

OSHA PEL:1 MG/M3
ACGIH TLV:0.5 MG/M3; 9192
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

Ingred Name:IRON OXIDE
CAS:1309-37-1
RTECS #:NO7400000
OSHA PEL:10 MG/M3 (FE)
ACGIH TLV:5 MG/M3(FE),B2; 9293

Ingred Name:NICKEL (SARA III)
CAS:7440-02-0
RTECS #:QR5950000
Other REC Limits:1 MG/CUM
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9192

Ingred Name:ORGANIC BINDER
OSHA PEL:10 MG/CUM
ACGIH TLV:10 MG/CUM

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

Routes of Entry: Inhalation:YES Skin:YES

Ingestion: YES
Reports of Carcinogenicity: NTP: YES IARC: YES OSHA: NO
Health Hazards Acute and Chronic: INHALATION: ASTHMA ALLERGIC, NASAL CAVITIES EFFECTS, DIFFUSE NODULAR FIBROSIS, COUGH, DYSPNEA, DECREASE IN PULMONARY FUNCTION, LOW WEIGHT, LUNG, & LIVER DAMAGE, SHAVERS DISEASE, PRELIMINARY FIBROSIS, ALZHEIMERS DISEASE, RESPIRATORY HYPERSENSITIVITY. SKIN: DERMATITIS, & IRRITATION. EYES: IRRITATION.
Explanation of Carcinogenicity: NICKEL, CHROMIUM & COBALT ALLOYS ARE SUSPECTED HUMAN & ANIMAL CARCINOGENS BY ACGIH.
Effects of Overexposure: INHALATION: PARKINSON'S DISEASE, ASTHENIA, INSOMNIA, METAL FUME FEVER, DRY THROAT, TIGHT CHEST, RALES, LOW BACK PAIN, VOMIT, FATIGUE, BLOOD/KIDNEY EFFECTS, FIBROTIC PNEUMOCONIOSIS & BENIGN PNEUMONCONIOSIS. EYES: IRRITATION. SKIN: DERMATITIS, & IRRITATION.
Medical Condition Aggravated by Exposure: N/K

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

First Aid: EYES: FLOOD WITH WATER. SKIN: WASH WITH SOAP & WATER TO REMOVE POWDER. INHALATION: REMOVE TO FRESH AIR. INGESTION: OBTAIN MEDICAL ATTENTION IN ALL CASES.

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

Flash Point: NONE
Extinguishing Media: USE CLASS D FIRE EXTINGUISHER.
Fire Fighting Procedures: TREAT AS A METALLIC FIRE.
Unusual Fire/Explosion Hazard: MODERATE FIRE HAZARD IN THE FORM OF DUST WHEN EXPOSED TO FLAME.

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

Spill Release Procedures: MATERIAL THAT IS SPILLED ONTO THE FLOOR MAY BECOME AIRBORNE BY NORMAL PLANT ACTIVITY. GOOD HOUSEKEEPING, BY SWEEPING THE AREA CLEAN, IS NECESSARY TO REMOVE THESE MATERIALS FROM BECOMING A SOURCE OF AIR CONTAMINATION.

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

Handling and Storage Precautions: AVOID EXCESSIVE CONTACT WITH SKIN & INGESTION. AVOID INHALATION.
Other Precautions: AVOID THE EFFECT OF DUST, FUMES, & MIST WHICH MAY BE

GENERATED BY THERMAL SPRAYING. DON'T PERMIT SPRAY DUST TO ENTER EYES, MOUTH, CUTS, SCRATCHES, OR OPEN WOUNDS.

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

Respiratory Protection: NIOSH APPROVED RESPIRATOR FOR DUST, FUMES, MISTS SHOULD BE WORN AT ALL TIMES DURING THE THERMAL SPRAY PROCESS TO PROTECT OPERATOR FROM DUST & FUMES.

Ventilation: ADEQUATE EXHAUST SYSTEM TO CREATE AN AIR VELOCITY OF 200 PPM DURING THERMAL SPRAYING.

Protective Gloves: ALUMINIZED

Eye P

rotection: GOGGLES WITH LENS SHADES (SEE SUPP.)

Other Protective Equipment: EAR PROTECTION, ALUMINIZED APRON, & EYE WASH STATION

Work Hygienic Practices: PRACTICE GOOD HOUSEKEEPING.

Supplemental Safety and Health

EYE PROTECTION: THE FOLLOWING LENS SHADES ARE RECOMMENDED FOR THE PROCESS INDICATED. COMBUSTION SPRAYING SHADE 5, PLASMA SPARYING UP TO 40 KW SHADE 9, 40 TO 60 KW SHADE 10 & >60 KW SHADE 11.

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

Solubility in Wa

ter: NEGLIGIBLE

Appearance and Odor: POWDER; NO ODOR

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

Stability Indicator/Materials to Avoid: YES

CHLORINATED HYDROCARBON VAPORS

Stability Condition to Avoid: PLASMA FLAME

Hazardous Decomposition Products: PHOSGENE/OZONE & NITRIC OXIDES INDEPENDENT OF POWDER & SIMILAR TO WELDING FUMES

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

Waste Disposal Methods: DISPOSE OF IN ACCORDANCE W/LOCAL, STATE, & FEDERAL REGULATIONS.

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