

SULZER METCO (US) INC -- METCO 45C-NS,45VF-NS,AMDRY 316,318,X-40,XPT-412 --
3439-01-408-0859

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

Product ID:METCO 45C-NS,45VF-NS,AMDRY 316,318,X-40,XPT-412

MSDS Date:05/21/1996

FSC:3439

NIIN:01-408-0859

Status Code:A

MSDS Number: CHZCS

=== Responsible Party ===

Company Name:SULZER METCO (US) INC

Address:1101 PROSPECT AVE

Box:1006

City:WESTBURY

State:NY

ZIP:11590-020

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Country:US

Info Phone Num:516-334-1300/800-424-9300(CHEMTREC)

Emergency Phone Num:516-334-1300/800-424-9300(CHEMTREC)

CAGE:01FK3

=== Contractor Identification ===

Company Name:SULZER METCO (US) INC

Address:1101 PROSPECT AVE

Box:City:WESTBURY

State:NY

ZIP:11590-2724

Country:US

Phone:516-334-1300

CAGE:01FK3

Company Name:SULZER PLASMA TECHNIK INC

Address:1972 MEIJER DR

Box:84310

City:TROY

State:MI

ZIP:48084-0310

Country:US

Phone:313-288-1200

CAGE:53654

===== Composition/Information on I

ngredients =====

Ingred Name:SILICON
CAS:7440-21-3
RTECS #:VW0400000
Fraction by Wt: 1%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:15 MG/M3 TDUST
ACGIH TLV:10 MG/M3 TDUST; 9596

Ingred Name:MANGANESE (SARA 313)
CAS:7439-96-5
RTECS #:OO9275000
Fraction by Wt: 1%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:C, 5 MG/M3 (FUME)
ACGIH TLV:0.2 MG/M3; 9596

Ingred Name:IRON
CAS:7439-89-6
RTECS #:NO4565500
Fraction by Wt: 1%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:10 MG/M3 (TDUST)
ACGIH TLV:5
MG/M3 (OXIDE FUME)

Ingred Name:NICKEL (SARA 313) (CERCLA)
CAS:7440-02-0
RTECS #:QR5950000
Fraction by Wt: 10%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9596

Ingred Name:CHROMIUM (SARA 313) (CERCLA)
CAS:7440-47-3
RTECS #:GB4200000
Fraction by Wt: 25%
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:COBALT (SARA 313)
CAS:7440-48-4
RTECS #:GF8750000
Fraction by Wt: 55%
Other REC Limits:NONE RECO

MMENDED
OSHA PEL:0.1 MG/M3
ACGIH TLV:0.02 MG/M3; A3; 9596

Ingred Name:TUNGSTEN, AS SOLUBLE COMPOUND
CAS:7440-33-7
RTECS #:YO7175000
Fraction by Wt: 7%
Other REC Limits:NONE RECOMMENDED
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3/3 STEL; 9596

===== 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 Chroni
c:EYES: CONJUNCTIVAL
IRRITATION,LACRIMATION. SKIN:
IRRITATION,DERMATITIS,SENSITIZATION,CHROME
LESIONS,DISCOLORATION,ECZEMA. INHALATION: IRRITATION OF RESPIRATORY
SYSTEM,SHORTNESS OF BREATH,COUGH,MUCOUS MEMBRANE
IRRITATION/ULCERATION. INGESTION: IRRITATION OF GI TRACT,LOSS OF
MUSCULAR COORDENATION,CONFUSION,CONVULSIONS.
Explanation of Carcinogenicity:NICKEL AND CHROMIUM: CLASSIFIED
CARCINOGENIC BY ACGIH,IARC,NTP. COBALT: ACGIH CLASSIFIED A3 ANIMAL
CARCINOGEN.
Effe
cts of Overexposure:EYES: CONJUNCTIVAL IRRITATION,LACRIMATION.
SKIN: IRRITATION,DERMATITIS,SENSITIZATION,CHROME
LESIONS,DISCOLORATION,ECZEMA. INHALATION: RESPIRATORY SYSTEM
IRRITATION,SHORTNESS OF BREATH, COUGH, MUCOUS M EMBRANE IRRITATION
AND ULCERATION. INGESTION: GI TRACT IRRITATION,LOSS OF MUSCULAR
COORDENATION,CONFUSION,CONVULSIONS.
Medical Cond Aggravated by Exposure:CONSULT A PHYSICIAN.

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

First Aid:EY

ES: FLUSH WITH LARGE AMOUNTS OF WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH SKIN WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION . INHALATION: MOVE TO FRESH AIR. IF IRRITATION OR RESPIRATORY DISTRESS PERSISTS, GET MEDICAL ATTENTION. INGESTION: GET MEDICAL ATTENTION.

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

Extinguishing Media:USE CLASS D FIRE EXTINGUISHER.

Fire Fighting Procedure:

TREAT AS A METALLIC FIRE. USE NIOSH/MSHA

APPROVED SELF-CONTAINED BREATHING APPARATUS AND FULL PROTECTIVE CLOTHING IF INVOLVED IN A FIRE.

Unusual Fire/Explosion Hazard:FINE METAL DUSTS ARE FLAMMABLE AND MAY EXPLODE WHEN EXPOSED TO HEAT, FLAME OR OXIDIZERS. AIRBORNE COBALT MAY IGNITE SPONTANEOUSLY.

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

Spill Release Procedures:VACUUM LOOSE POWDER USING VACUUMS APPROPRIATE FOR HANDLING METALLIC DUSTS AND ARE EQUIPPED WITH HEPA FILTRATION.

WIPE THE AREA CLEAN. DO NOT USE WATER FOR CLEAN UP OPERATIONS. DO NOT SWEEP. AVOID GENERATING DUST.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage Precautions:STORE AWAY FROM INCOMPATIBLES, AND IN A WELL VENTILATED, CLEAN, COOL, AND DRY AREA.STORE IN A MANNER TO MINIMIZE PUNCTURES AND BREAKAGE OF CONTAINERS.

Other Precautions:AVOID INGESTION, INHALATION, AND EXCESSIVE SKIN CONTACT.

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

Respiratory Protection:WEAR AN NIOSH APPROVED RESPIRATOR WITH FILTER CARTRIDGES APPROVED FOR DUST/FUMES/MISTS DURING THERMAL SPRAY PROCESS. RESPIRATORS MAY ALSO BE WORN WHEN HANDLING GENERATES DUST

Ventilation:PRODUCT SHOULD BE USED WITH APPROPRIATE LOCAL EXHAUST VENTILATION PROVIDED.

Protective Gloves:ALUMINIZED GLOVES DURING PLASMA SPRAYING

Eye Protection:WEAR GOGGLES APPROPRIATE FOR

R OPERATION.

Other Protective Equipment:WEAR APPROPRIATE PROTECTIVE CLOTHING DURING PRODUCT HANDLING AND PRODUCT APPLICATION TO AVOID EXCESSIVE SKIN CONTACT.

Work Hygienic Practices:WASH FACILITIES AND EYE WASH STATION ARE RECOMMENDED.

Supplemental Safety and Health

EAR PROTECTION MUST BE WORN WHEN OPERATOR IS SUBJECTED TO EXCESSIVE NOISE LEVELS. AN ALUMINIZED APRON IS TO BE WORN DURING THE PLASMA SPRAY PROCESS. RUBBER OR OTHER APPROPRIATE GLOVES MAY BE WORN AS NECESSARY

DURING PRODUCT HANDLING, OTHER THAN PLASMA SPRAYING, TO AVOID EXCESSIVE SKIN CONTACT.

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

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:2000F,1093C

Spec Gravity:3.0

Solubility in Water:INSOLUBLE

Appearance and Odor:POWDER, NO ODOR.

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

Stability Indicator/Materials to Avoid:YES

CHLORINE,FLUORINE,OXIDIZERS,CALCIUM,CESIUM

CARBIDE,CARBONATES,ACIDS,SULFUR,SELENIUM,COMBUST

IBLES,NICKEL

NITRATE,BROMINE.

Stability Condition to Avoid:CREATING AIRBORNE DUST. AVOID EXCESSIVE HEAT, FLAMES AND IGNITION SOURCES.

Hazardous Decomposition Products:OZONE AND NITRIC OXIDE ARE FORMED BY PLASMA FLAME (SIMILAR TO WELDING FUMES).THIS ACTION IS INDEPENDENT OF METAL POWDER.

Conditions to Avoid Polymerization:WILL NOT OCCUR.

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

Waste Disposal Methods:EMPTY PRODUCT CONTAINERS, PRODUCT WASTE AND CLEAN

NING MEDIA SHOULD BE STORED AND DISPOSED OF ACCORDING TO THE
APPROPRIATE LOCAL, STATE, AND FEDERAL REGULATORY GUIDELINES.

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