

SULZER METCO (US) INC -- METCO 72F-NS -- 3439-01-382-1225

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

Product ID:METCO 72F-NS
MSDS Date:01/13/1998
FSC:3439
NIIN:01-382-1225
Status Code:A
MSDS Number: CKMJP
=== Responsible Party ===
Company Name:SULZER METCO (US) INC
Address:1101 PROSPECT AVE
Box:1006
City:WESTBURY
State:NY
ZIP:11590-0201
Country:US
Info Phone Num:516-334-1300
Emergency Phone Num:516-334-1
300/202-483-7616
Resp. Party Other MSDS Num.:50-329
Chemtrec Ind/Phone:(800)424-9300
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

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

Ingred Name:TUNGSTEN CARBIDE
CAS:12070-12-1
RTECS #:YO7250000
= Wt:87.

Ingred Name:COBALT
CAS:7440-48-4
RTECS #:GF8750000
= Wt:12.
OSHA PEL:0.1 MG/M3
ACGI

H TLV:0.02 MG/M3

Ingred Name:IRON

CAS:7439-89-6

RTECS #:NO4565500

= Wt:1.

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

LD50 LC50 Mixture:NONE PROVIDED BY MFR.

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES

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

Health Hazards Acute and Chronic:TARGET ORGANS: RESPIRATORY SYSTEM,
SKIN, EYES, & GASTROINTESTINAL TRACT. INHALATION: MAY CAUSE LUNG
DAMAGE & RESPIRATORY SYSTEM IRRITATION. MAY CAUSE PROGRESSIVE,

DIFFUSE PNEUMONIA, RESPIRATORY SENSITIZATION. MAY CAUSE SIDEROSIS
(BENIGN PNEUMOCONIOSIS). INGESTION: MAY CAUSE IRRITATION TO THE
RESPIRATORY SYSTEM & GASTROINTESTINAL TRACT. SKIN: MAY CAUSE
ALLERGIC DERMATITIS OR ECZEMA. EYES: MAY CAUSE IRRITATION.

Explanation of Carcinogenicity:NONE PROVIDED BY MFR.

Effects of Overexposure:EYE: POSSIBLE IRRITATION. SKIN: POSSIBLE
IRRITATION, DERMATITIS, ECZEMA. INHALATION: POSSIBLE IRRITATION TO
THE RESPIRATORY SYSTEM, RESPIRATORY

SENSITIZATION CHARACTERIZED BY

COUGH, WHEEZING & SHORTNESSES OF BREATH. INGESTION: POSSIBLE
IRRITATION TO THE RESPIRATORY SYSTEM & GASTROINTESTINAL TRACT.

Medical Cond Aggravated by Exposure:CONSULT A PHYSICIAN

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

First Aid:EYE: FLUSH EYE WITH WATER FOR AT LEAST 15 TO 20 MINS WHILE
HOLDING EYELID OPEN. IF IRRITATION PERSISTS, CONSULT A PHYSICIAN.
SKIN: WASH WITH SOAP & WATER. IF IRRITATION PERSISTS, CONSULT A

PHYSICIAN. INHALATION: EXPOSE TO FRESH AIR. CONSULT A PHYSICIAN IF
IRRITATION OR RESPIRATORY DISTRESS PERSISTS. INGESTION: CONSULT A
PHYSICIAN.

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

Extinguishing Media:USE CLASS D FIRE EXTINGUISHER

Fire Fighting Procedures: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 FLAMM

ABLE & MAY

EXPLODE WHEN EXPOSED TO HEAT, FLAME OR STRONG OXIDIZERS. TUNGSTEN CARBIDE OXIDIZES ON HEATING IN AIR; BURNS IN FLUORINE AT ROOM TEMPERATURE. COBALT MAY IGNITE IF AIRBORNE IN THE PRESENCE OF AN IGNITION SOURCE OR SPONTANEOUSLY. IRON MAY IGNITE IN THE PRESENCE OF AN IGNITION SOURCE.

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

Spill Release Procedures: VACUUM LOOSE POWDER ONLY WITH VACUUMS EQUIPPED WITH HEPA FILTERATION. VACUUMS APPROPRIATE FOR USE WITH METALLIC DUSTS SHOULD BE UTILIZED. WIPE THE AREA CLEAN. DO NOT USE WATER FOR CLEAN UP OPERATIONS. DO NOT SWEEP. AVOID GENERATING AIRBORNE DUST. Neutralizing Agent: NONE PROVIDED BY MFR.

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

Handling and Storage Precautions: STORE AWAY FROM INCOMPATIBLES. STORE PRODUCT CONTAINERS IN A WELL-VENTILATED, CLEAN, COOL & DRY AREA. STORE IN A MANNER TO MINIMIZE PUNCTURES & BREAKAGE OF CONTAINERS. Other Precautions: AVOID INGESTION, INHALATION & EXCESSIVE SKIN CONTACT.

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

Respiratory Protection: NIOSH-APPROVED RESPIRATOR WITH FILTER CARTRIDGES APPROVED FOR DUST/FUMES/MISTS SHOULD BE WORN AT ALL TIMES DURING THE THERMAL SPRAY PROCESS TO PROTECT THE OPERATOR FROM EXPOSURE TO DUST & FUMES. RESPIRATORS MAY ALSO BE WORN WHEN PRODUCT HANDLING GENERATES DUST. Ventilation: PRODUCT SHOULD BE USED WITH THE APPROPRIATE LOCAL EXHAUST VENTILATION PROVIDED. Protective Gloves: ALUMINIZED GLOVES FOR PLASMA SPRAY PROCESS, RUBBER OR APPROPRIATE AS NEEDED. Eye Protection: USE THE APPROPRIATE LENS SHADES FOR PROCESS USED. Other Protective Equipment: EAR PROTECTION AS APPROPRIATE. AN ALUMINIZED APRON IS TO BE WORN DURING THE PLASMA SPRAY PROCESS. OTHER APPROPRIATE PROTECTIVE CLOTHING MAY BE WORN AS NECESSARY DURING PRODUCT HANDLING TO AVOID CONTACT. Supplemental Safety and Health

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

cal Properties =====

HCC:N1

Melt/Freeze Pt:M.P/F.P Text:2200 TO 2300 DEG F
Decomp Temp:Decomp Text:NONE PROVIDED BY MFR.
Spec Gravity:4.5 TO 6.3 (H2O=1)
Viscosity:NONE PROVIDED BY MFR.
Solubility in Water:INSOLUBLE
Appearance and Odor:POWDER, NO ODOR
Percent Volatiles by Volume:NONE PROVIDE
Corrosion Rate:NONE PROVIDED BY MFR

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

Stability Indicator/Materials to Avoid:YES
TUNGSTEN CARBIDE IS INCOMPATABLE WITH FLUORINE,
CHLORINE, TRIFLUORIDE,
OXIDES OF NITROGEN & LEAD DIOXIDE. COBALT IS INCOMPATIBLE WITH
STRONG OXIDIZERS & AMMONIUM NITRATE.
Stability Condition to Avoid:NONE PROVIDED BY MFR.
Hazardous Decomposition Products:OZONE & NITRIC OXIDE ARE FORMED BY THE
PLASMA FLAME (SIMILAR TO WELDING FUMES). THIS ACTION IS INDEPENDENT
OF METAL POWDER.
Conditions to Avoid Polymerization:WILL NOT OCCUR

===== Ecological Information =====

Ecological:NOT PROVIDED

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

Waste Disposal Methods:EMPTY PRODUCT CONTAINERS, PRODUCT WASTE &
CLEANING MEDIA SHOULD BE STORED & DISPOSED OF ACCORDING TO THE
APPROPRIATE LOCAL, STATE & FEDERAL REGULATORY GUIDELINES.

===== MSDS Transport Information =====

Transport Information:SEE TRANSPORTATION DATA.

===== Regulatory Information =====

SARA Title III Information:SULFURIC ACID IS EHS WIT

H RQ = 1000 LB. LEAD

IS 313 CHEMICAL

Federal Regulatory Information:SULFURIC ACID CERCLA RQ = 1000 LB. LEAD

CERCLA RQ = 10 LB

State Regulatory Information:NOT PROVIDED

===== Other Information =====

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