

KENNAMETAL INC. -- TPG-324/KC850 -- 3455-01-184-9208

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

Product ID:TPG-324/KC850

MSDS Date:01/01/1987

FSC:3455

NIIN:01-184-9208

MSDS Number: BGQBD

=== Responsible Party ===

Company Name:KENNAMETAL INC.

Emergency Phone Num:800-424-9300

CAGE:HO324

=== Contractor Identification ===

Company Name:KENNAMETAL INC METAL CUTTING DIV

Address:4610 BEIDLER RD

Box:City:WILLOUGHB

Y

State:OH

ZIP:44094-4603

Country:US

CAGE:01517

Company Name:KENNAMETAL INC.

Box:231

CAGE:HO324

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

Ingred Name:TUNGSTEN CARBIDE (CAS #12070-12-1) (PEL-5 MG/CUM, MFR)
30.0-97.7%

ACGIH TLV:5 MG/CUM,AS W

Ingred Name:COBALT (SARA III)

CAS:7440-48-4

RTECS #:GF8750000

Fraction by Wt: 2-25%

OSHA PEL:0.1 MG/M3;AS CO

ACGIH TLV:0.05 MG/M3;DUST 9293

Ingred Name:TANTALUM CARBIDE (CAS # 12070-06-3) (PEL-5 MG/CUM, MFR)
0.1-15.0

%
ACGIH TLV:5 MG/CUM (MFR)

Ingred Name:TITANIUM CARBIDE (CAS # 12070-08-5) (PEL-5 MG/CUM, MFR)
0.1-15.0%

Ingred Name:NIOBIUM CARBIDE (CAS #12069-94-2)(PEL-5 MG/CUM, MFR)
0.1-15.0%
ACGIH TLV:5 MG/CUM (MFR)

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

Health Hazards Acute and Chronic:MAY CAUSE TEMPORARY OR PERMANENT
RESPIRATORY DISEASE. PERMANENT RESPIRATORY DISEASE CAN LEAD TO
DISABILITY OR DEATH. NONE OF THE COMPONENTS OF THIS MATERIAL HAS
BEEN IDE

NTIFIED AS KNOWN OR SUSPECTED C ARCINOGENS.

Effects of Overexposure:OVEREXPOSURE TO THIS MATERIAL IN THE FORM OF
METALLURGICAL POWDER,DUST OR MIST FROM GRINDING OR SWEEPING IS
HAZARDOUS TO HEALTH. MAY CAUSE EYE,SKIN & MUCOUS MEMBRANE
IRRITATION.

Medical Cond Aggravated by Exposure:CERTAIN PULMONARY & SKIN CONDITIONS
MAY BE AGGRAVATED BY EXPOSURE.

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

First Aid:IN ALL CASES,GET MED ATTN IMMED.INHAL:REMOVE FROM EXP
TO
FRESH AIR IMMED.STOP BRTHING-GIVE ARTIFCL RESP.KEEP WARM,AT
REST.SKIN:REMOVE CONTAM CLOTHES,SHOES IMMED.WASH EXP AREA
W/SOAP/MILD DETERGENT,LRG AMTS H*2O 15-20 MIN.EYE:WASH IMMED W/LRG
AMTS H*2O 15-20 MIN.INGEST:IF CONSCIOUS,IMMED GIVE LRG AMTS
H*2O,INDUCE VOMITING

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

Extinguishing Media:LOCALIZED POWDER FIRE-DRY SAND,DRY DOLOMITE,NACL OR
SODA ASH

Fire Fighting Procedures:MOVE CNTNR IF POSS.COOL FIRE
EXP CNTNR

W/H*2O.LRG FIRE-USE UNMANNED HOSE HOLDR/MONITR NOZZ;ELSE
W/DRAW,LET(SEE SUPP DATA)

Unusual Fire/Explosion Hazard:FINELY DIVIDED TUNGSTEN CARBIDE
POWDR/GRINDING DUST EXPECT TO BE FIRE/EXPLO HAZ WHEN EXP TO HIGH
TEMP OR (SEE SUPP DATA)

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

Spill Release Procedures:SWEEP UP W/MINIMUM DUST GENERATION & PLACE
INTO SUITABLE CLEAN,DRY CNTNRS FOR LATER DISPOSAL OR RECLAMATION.
RESIDUE SHOULD BE CLEANED UP

USING A HIGH-EFFICIENCY PARTICULATE
FILTER VACUUM OR WET CLEAN UP. USE APPROPRIATE RESPIRATORY
PROTECTION.

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

Handling and Storage Precautions:AVOID DISPERSN OF DUST IN AIR.FINELY
DIVIDED PARTICLES,DUST,FUMES POSS FLAMMABLE/EXPLOSIVE.KEEP FROM
SPARK/IGNITN SOURCE.STORE IN CLEAN,DRY,COOL AREA.
Other Precautions:WASH HANDS AFT HANDLE,BEFORE EAT/SMOKE.DONT SHAKE
CLOTHES,RAGS,OTHR ITEMS TO REMOVE DUST.REMOVE DUST
BY
WASHING/VACUUMING.PERIODIC MEDICAL EXAMS RECM FOR PERSONS REGULARLY
EXPOSED TO DUST/MIST

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

Ventilation:LOCAL EXHAUST/GEN DILUATION TO KEEP EXPOS LEVELS