Product ID: PYROMET 625 HI - TEMP MSDS Date:08/17/1999 FSC:3439 NIIN:01-097-5989 Status Code:A MSDS Number: CLPVD === Responsible Party === Company Name: CARPENTER TECHNOLOGY CORP Address:101 W BERN ST Box:14662 City:READING State:PA ZIP:19612-4662 Country:US Info Phone Num:610-208-2134 / 610-2 08-2457/2457 Emergency Phone Num:215-371-2000 CAGE:71321 === Contractor Identification === Company Name: CARPENTER TECHNOLOGY CORP Address:101 W BERN ST Box:14662 City:READING State:PA ZIP:19612-4662 Country:US Phone:610-208-2134 / 610-208-2457/2457 CAGE:71321

Ingred Name:NICKEL (SARA III) CAS:7440-02-0 RTECS #:QR5950000 = Wt:65. OSHA PEL:1 MG/M3 ACGIH TLV:0.05 MG/M3

Ingred Name:CHROMIUM (SARA III) CAS:7440-47-3 RTECS #:GB42 00000 = Wt:22. Other REC Limits:NONE RECOMMENDED OSHA PEL:1 MG/M3 ACGIH TLV:0.5 MG/M3; 9394 EPA Rpt Qty:1 LB DOT Rpt Qty:1 LB

Ingred Name:IRON OXIDE CAS:1309-37-1 RTECS #:NO7400000 = Wt:2.5 Other REC Limits:NONE RECOMMENDED OSHA PEL:10 MG/M3 (FE) ACGIH TLV:5MG/M3(FE)FUME,B2;94

Ingred Name:COBALT (SARA III) CAS:7440-48-4 RTECS #:GF8750000 = Wt:.9 Other REC Limits:NONE RECOMMENDED OSHA PEL:0.1 MG/M3 ACGIH TLV:0.05 MG/M3;DUST 9394

Ingred Name:MOLYBDENUM METAL CAS:7439-98-7 RTECS #:QA4680000 = W t:9. Other REC Limits:NONE RECOMMENDED OSHA PEL:15 MG/M3 TDUST INSOL ACGIH TLV:10 MG/M3; 9394 INSOL

Ingred Name:ALUMINIUM CAS:7429-90-5 RTECS #:BD0330000 = Wt:.2 OSHA PEL:15 MG/M3 ACGIH TLV:10 MG/M3

Ingred Name:TITANIUM DIOXIDE CAS:13463-67-7 RTECS #:XR2275000 = Wt:.2 OSHA PEL:15 MG/M3 ACGIH TLV:10 MG/M3

Ingred Name:COPPER CAS:7440-50-8 RTECS #:GL5325000 = Wt:.1 OSHA PEL:1 MG/M3 ACGIH TLV:1 MG/M3 EPA Rpt Qty:5000 LBS DOT Rpt Qty:5000 LBS

Ingred Name:MANGANESE CAS:7439-96-5 RTECS #:OO9275000 Routes of Entry: Inhalation:YES Skin:NO Ingestion:NO Reports of Carcinogenicity:NTP:YES IARC:YES OSHA:NO Health Hazards Acute and Chronic:SPECIALTY STEEL ALLOYS ARE GENERALLY NOT CONSIDERED HAZARDOUS AS SHIPPED. HOWEVER, CUTTING, WELDING, GRINDING, MELTING OR OTHER PROCESSES MAY GENERATE A HAZARDOUS DUST OR FUME. WELDING FUMES ARE KNOW TO CAUSE METAL FUME FEVER. CHROMIUM FUMES ARE TOXIC TO LUNGS. MAY CAUSE EYE AND SKIN IRRITATION, AND SKIN SENSITIVITY. MAY BE HARMFUL IF SWALLOWED. CHRONIC: SKIN ULCERATION, DERMATITIS, LIVER & KIDNEY DAMAGE, SIDEROSIS, CNS EFFECTS,

Explanation of Carcinogenicity:CHROMIUM(IV) AND NICKEL AND/OR THEIR COMPOUNDS ARE LISTED AS CARCINOGENS BY NTP & IARC. SEE INDIVIDUAL REPORTS FOR DETAILS. COBALT 7 SELENIUM ARE LISTED BY NTP AS 2B CARCINOGEN.

Effects of Overexposure:RESPIRATORY IRRITATION. ALLERGIC SKIN OR

RESPIRATORY REACTION. LUNG DAMAGE WHICH MAY NOT BE REVERSABLE. LESS LIKELY IS GI DISTRESS WITH WEIGHT LOSS. IRRITATION OF EYES AND MUCUS MEMBRANE,

Medical Cond Aggravated by Exposure:NO INFORMATION GIVEN BY MFR ON MSDS.

First Aid:INHALATION: MOVE PERSON TO FRESH AIR UNTIL RECOVERED, CONSULT A PHYSICIAN. SKIN: WASH WITH WATER AND MILD DETERGENT, CONSULT A PHYSICIAN. EYE: FLUSH THOROUGHLY WITH WATER FOR AT LEAST 15 MIN, CONSULT A PHYSICIAN. INGESTION: SEEK MEDICAL HELP.

Flash Point:NONE Lower Limits:NONE Upper Limits:NONE Extinguishing Media:HMIS:PRODUCT IS NON FLAMMABLE. EXTINGUISH FIRE WITH MEDIA APPROPRIATE FOR SOURCE OF FIRE. Fire Fighting Procedures:NO INFORMATION GIVEN BY MFR ON MSDS. Unusual Fire/Explosion Hazard:UNLESS OTHERWISE NOTED, NONE. PRODUCT IS A SOLID METAL.

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Spill Release Procedures: PRODUCT IS A SOLID METAL AS SHIPPED. NO POTENTIAL FOR SPILL OR LEAK. Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER. Handling and Storage Precautions: NO INFORMATION GIVEN BY MFR ON MSDS. HMIS: NORMAL STORAGE FOR STEEL STOCKS. **Other Precautions:NONE Respiratory Protection: IF YOUR** PROCESS CAUSES A RELEASE OF DUST OR FUME IN EXCESS OF THE PERMISSIBLE EXPOSURE LIMIT, NIOSH APPROVED RESPIRATORS FOR PROTECTION AGAINST AIRBORNE DUST OR FUMES SHOULD BE WORN. RESPIRATORS SHOUL D BE USED I/A/W 29CFR1910.134. Ventilation: IF YOUR PROCESS CAUSES A RELEASE OF DUST/FUME, USE LOC & GEN EXHST VENT TO KEEP AIRBORNE CONC OF DUST/FUMES BELOW TLV. Protective Gloves: GLOVES &/OR BARRIER CREAMS MAY BE NEEDED Eye Protection: SAFETY GLASSES OR GOGGLES Other Protective Equipment:H AND PROTECTION MAY BE NECESSARY TO PREVENT SKIN SENSITIZATION & DERMATITIS. USE EYE PROTECTION IF PROCESS WARRENTS. Work Hygienic Practices: HMIS: USE GOOD INDUSTRIAL HYGIENE PRACTICE. AVOID UNNECESSARY EXPOSURE. WASH THOROUGHLY BEFORE EATING OR DRINKING Supplemental Safety and Health NONE HCC:N1 NRC/State Lic Num:NONE

Boiling Pt:B.P. Text:HIGH Melt/Freeze Pt:M.P/F.P Text:>2400F,>131

Vapor Pres:NIL

Vapor Density

:NIL Spec Gravity:7.5-8.5 Solubility in Water:INSOLUBLE Appearance and Odor:SOLID, GRAY IN COLOR, ODORLESS METAL.
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Stability Indicator/Materials to Avoid:YES ACIDS AND OXIDIZERS. Stability Condition to Avoid:NO INFORMATION GIVEN BY MFR ON MSDS. Hazardous Decomposition Products:NONE FOR PRODUCT AS SHIPPED. (HMIS: DURING WELING HAZARDOUS METAL OXIDES AND FUMES ARE EMITTED) Conditions to Avoid Polymerization:WILL NOT OCCUR.
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Waste Disposal Methods:DISPOSAL SHOULD BE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS. RECYCLING OF ALL METALLIC PRODUCTS AS SCRAP IS STRONGLY ENCOURAGED.
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Transport Information: PSN FOR WASTE: HAZARDOUS WASTE, SOLID, N.O.S, 9, NA3077, III.
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SARA Title III Information :SEC 311/312: END PRODUCTS MAY REQUIRE REPORTING. SEC 313: PRODUCT INGREDIENTS SUBJECT TO REPORTING MAY INCLUDE: CHROMIUM, NICKEL, MANGANESE, COBALT, COPPER, VANADIUM, TITANIUM, OR ALUMINUM. REGULATION S SUCH AS CLEAN AIR & CLEAN WATER ACTS, RCRA MAY APPLY TO THE HANDLING OF STEEL GRINDINGS AND PARTICULATES FROM PROCESSING. Federal Regulatory Information:TSCA: NOT APPLICABLE. State Regulatory Information:CALIFORNIA SAFE DRINKING WATER ACT (PROP 65): NICKEL (7440-02-0), CO
BALT (7440-48-4)
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