

CARPENTER TECHNOLOGY CORPORATION -- TYPE 416 HF ANL PKL, ASTM-A-582-80 --
9510-00-222-4999

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

Product ID:TYPE 416 HF ANL PKL, ASTM-A-582-80
MSDS Date:01/01/1987
FSC:9510
NIIN:00-222-4999
MSDS Number: BDJZY
=== Responsible Party ===
Company Name:CARPENTER TECHNOLOGY CORPORATION
Emergency Phone Num:(215) 371-2000
CAGE:71321
=== Contractor Identification ===
Company Na
me: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

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

Ingred Name:IRON OXIDE
CAS:1309-37-1
RTECS #:NO7400000
Fraction by Wt: 84.0%
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
Fraction by Wt: 0.35%
OSHA PEL:1 MG/M3
ACGIH TLV:1 MG/M3; 9192

Ingred Name

:MANGANESE (SARA III)
CAS:7439-96-5
RTECS #:OO9275000
Fraction by Wt: 1.25%
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
Fraction by Wt: 13.0%
OSHA PEL:1 MG/M3
ACGIH TLV:0.5 MG/M3; 9192
EPA Rpt Qty:1 LB
DOT Rpt Qty:1 LB

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

Effects of Overexposure:NONE CONSIDERED HAZ IN SOLID
STATE;HOWEVER,METALLIC FUMES/DUST MAY CAUSE RESP,EYES,LUNG
PROBLEMS.

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

First Aid:INHAL:MOVE TO FRESH AIR.GET MED ATTN;SKIN:WASH W/WATER & MILD
DETERGENT.CONSULT A PHYSICIAN;EYES:FLUSH WITH PLENTY OF WATER.GET
MED HELP;INGESTION:WHILE INGESTION OF LG ENOUGH QTY TO CAUSE HEALTH
EFFE CTS IS UNLIKELY,CONSULT A DR IF IT OCCURS.

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

Flash Point:NONE
Extinguishing Media:EXTINGUISH WITH AGENT SUITABLE FOR SURROUNDING FIRE
Fire F
ighting Procedures:WEAR SELF-CNTD BRTHG,APP H*20 SPRAY TO COOL
CONTR.
Unusual Fire/Explosion Hazard:NONE NOTED BY MANUFACTURER.

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

Spill Release Procedures:PRODUCT IS SOLID METAL.NO POTENTIAL FOR SPILL
OR LEAK. HOWEVER IF SMALL METALLIC PIECES ARE SPILLED,COLLECT THOSE
& REUSE.

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

Handling and Storage Precautions:STORE IN COOL,DRY,WELL VENTILATED
A

REA. PROTECT FROM PHYSICAL DAMAGE.AVOID ANY PHYSICAL CONTACT. KEEP CONTAINERS TIGHTLY CLOSED

Other Precautions:FERROCHROME ALLOYS HAVE BEEN ASSOCIATED W/LUNG CHGS.CHROMIUM,COBALT-CHROMIUM ALLOYS,AND NICKEL HAVE BEEN IDENTIFIED AS CARCINOGEN.AVOID BREATHING DUST/FMES DURING GRINDING/WELDING PROCESSES

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

Respiratory Protection:IF FME OR DUST IS RELEASED,USE NIOSH APPRVD RESP Ventilation:FOR DUST/FUME,USE LOCAL & GENERAL VENTILATION TO KEEP 7.5 Solubility in Water:NEGLIGIBLE Appearance and Odor:SOLID METAL,ODORLESS Percent Volatiles by Volume:N/

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

Stability Indicator/Materials to Avoid:YES NONE Stability Condition to Avoid:NOT KNOWN Hazardous Decomposition Products:NONE EXPECTED

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

Waste Disposal Methods:IN THE EVENT OF METAL OR METAL PIECES ARE TO BE DISPOSED, CONSULT LOCAL AUTHORITIES FOR DISPOSAL OR SHIP TO RECYCLING FACILITIES.

Disclaimer (provided with this information by the compiling agencies): This information is formulated for use by elements of the Department of Defense. The United States of America in no manner whatsoever, expressly or implied, warrants this information to be accurate and disclaims all liability for its use. Any person utilizing this document should seek competent professional advice to verify and assume responsibility for the suitability of this information to their particular situation.