

WHITTAKER ORDNANCE -- PRESSURE CARTRIDGE,4181 -- 1377-00-178-8416

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Product Identification
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Product ID:PRESSURE CARTRIDGE,4181

MSDS Date:10/25/1991

FSC:1377

NIIN:00-178-8416

MSDS Number: BPZQN

=== Responsible Party ===

Company Name:WHITTAKER ORDNANCE

Address:2751 SAN JUAN ROAD

City:HOLLISTER

State:CA

ZIP:95023

Country:US

Info Phone Num:408-637-5851

Emergency Phone Num:800-255-3924 (CHEM-
TEL,INC)

Preparer's Name:JIM HART

CAGE:IO940

=== Contractor Identification ===

Company Name:UNITED TECHNOLOGIES INC. SIKORSKY AIRCRAFT DIV.

Address:6900 MAIN STREET

Box:7016

City:STRATFORD

State:CT

ZIP:06601-1381

Country:US

Phone:203-386-3791

CAGE:78286

Company Name:WHITTAKER ORDNANCE

Address:2751 SAN JUAN RD

Box:148

City:HOLLISTER

State:CA

ZIP:95023

Country:US

Phone:408-637-5851

CAGE:IO940

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Composition/Information on Ingredients
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Ingred Name:ZIRCONIUM

CAS:7440-67-7

RTECS #:ZH7070000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:5 MG/M3/10 MG/M3STEL
ACGIH TLV:5 MG/M3/10 MG/M3STEL

Ingr Name:AMMONIUM DICHROMATE (SARA III).OSHA PEL FOR CHROMIC ACID &
CHROMATES.ACGIH TLV FOR CR(VI) COMPOUNDS.

CAS:7789-09-5
RTECS #:HX7650000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.1 MG(CRO3)/M3,CEIL
ACGIH TLV:0.05 MG(CR(VI))/M3
EPA Rpt Qty:10 LBS
DOT Rpt Qty:10 LBS

Ingr Name:AMMONIUM PERCHLORATE
CAS:7790-98-9
RTECS #:SC7520000
Other REC Limits:NONE RECOMMENDED

Ingr
ed Name:BARIUM CHROMATE.OSHA PEL FOR CHROMIC ACID & CHROMATES.ACGIH
TLV FOR CR(VI) COMPOUNDS.

CAS:10294-40-3
RTECS #:CQ8760000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:0.1 MG(CRO3)/M3,CEIL
ACGIH TLV:0.05 MG(CR(VI))/M3

Ingr Name:CYCLONITE (RDX)
CAS:121-82-4
RTECS #:XY9450000
Other REC Limits:NONE RECOMMENDED
OSHA PEL:1.5 MG/M3,SKIN
ACGIH TLV:1.5 MG/M3,SKIN

Ingr Name:NITROCELLULOSE
CAS:9004-70-0
RTECS #:QW0970000
Other REC Limits:NONE RECOMMENDED

===== Hazards Identif

ication =====

LD50 LC50 Mixture:NOT KNOWN

Routes of Entry: Inhalation:NO Skin:NO Ingestion:NO

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

Health Hazards Acute and Chronic:HAZARDOUS CONSTITUENTS SEALED WITHIN MFR ARTICLE.NO CHEMICAL EXPOSURE UNDER NORMAL HANDLING CONDITIONS EXCEPT WHEN UNIT IS IGNITED.EXPOSURE OF PERSONNEL TO IGNITION OF THIS UNIT MAY RESULT IN PHYSICAL INJURY.

Explanation of Carcinogenicity:CR(VI) CMPD:SUFF EVID FOR CARCIN IN HUMA

NS & ANIMALS (IARC,1987).CR & CERTAIN CR CMPD:KNOWN HUMAN CARCINOGEN (SEE SUPP)

Effects of Overexposure:EYES/SKIN/INGESTION/INHALATION:NOT LIKELY ROUTES OF EXPOSURE FOR SEALED HAZARDOUS CONSTITUENTS.INHALATION OF COMBUSTION PRODUCTS COULD IRRITATE RESPIRATORY SYSTEM.CONTACT OF SKIN OR EYES MAY CAUSE IRR ITATION.

Medical Cond Aggravated by Exposure:COMBUSTION PRODUCTS COULD AGGRAVATE EXISTING RESPIRATORY CONDITION.

===== First Aid Measures =====
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First Aid:FOLLOW APPROPRIATE LOCAL EMERGENCY REACTION PLANS.GIVE FIRST AID APPROPRIATE TO INJURY. INHALATION:IF EXPOSED TO COMBUSTION PRODUCTS,REMOVE TO AREA OF FRESH AIR.SEEK MEDICAL ATTENTION IF NECESSARY.

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

Flash Point:NOT KNOWN

Lower Limits:NOT KNOWN

Upper Limits:NOT KNOWN

Extinguishing Media:NOT EXTINGUISHABLE.MAY BE ACTIVATED BY FIRE IN SURROUNDING PACKAGING OR COMBUSTIBLES.USE MEDIA APPROPRIATE F OR (SEE SUP)

Fire Fighting Procedures:ONLY FIGHT DIVISION 4 (CLASS C) FIRE FROM A SAFE FIRE-FIGHTING OPERATIONAL DISTANCE.EVACUATE ALL PERSONNEL FROM IMMEDIATE AREA OF FIRE INVOLVING EXPLOSIVES.

Unusual Fire/Explosion Hazard:MODERATE FIRE HAZARD.INITIATION OF UNIT MAY RESULT IN SOME FRAGMENTATION AS WELL AS RELEASE OF SMOKE,FUMES,& GASES CONSIDERED TOXIC & IRRITATING.

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

Spill Release Procedures:IF UNIT BECOME

S DAMAGED SO AS TO EXPOSE SEALED

MATERIAL,CONSULT WITH WHITTAKER ORDNANCE ENGINEERS FOR GUIDANCE.

Neutralizing Agent:NOT KNOWN

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

Handling and Storage Precautions:AUTHORIZE HANDLING ONLY BY
TRAINED,QUALIFIED PERS.HANDLE,STORE,TRANSPORT AS CLASS C
EXPLOSICE.DO NOT STORE WITH HIGH EXPLOSIVES.KEEP AWAY FROM FIRE.
Other Precautions:KEEP UNIT SHUNTED UNTIL CONNECTION TO CIRCUITRY.NEVER
ATTEMPT TO DISASSEMBLE,MACHINE OR
MODIFY UNITS OR PHYSICAL INJURY
MAY RESULT.TEST FIRE UNITS ONLY IN LOCATION ISOLATED FROM PERSONNEL
& VENTED TO OUTSIDE WORK AREA.

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

Respiratory Protection:IF EXPOSED TO COMBUSTION PRODUCTS,USE A NIOSH
APPROVED ORGANIC VAPOR,ACID GAS CARTRIDGE RESPIRATOR WITH DUST
FILTERS.IN EMERGENCY FIRE,USE SELF-CONTAINED BREATHING APPARATUS
AND FULL FACE PROTECTION I S RECOMMENDED.
Ventilation:LOCAL EXHAUST TO OUTSIDE A
TMOSPHERE.
Eye Protection:SAFETY GLASSES
Other Protective Equipment:FLAME RETARDANT,COTTON CLOTHING.CONDUCTIVE
FOOTWEAR OR OTHER PERS GROUNDING RECOMMENDED WHEN HANDLING EXPOSED
UNITS.
Work Hygienic Practices:OPERATIONAL SHIELDING & HEARING PROT
RECOMMENDED FOR TESTING AS NEEDED.AVOID BREATHING/INGESTION
PRODUCTS OF COMBUSTION.
Supplemental Safety and Health
TOTAL NET EXPLOSIVE WEIGHT:2.05 G/UNIT.EXTING MEDIA:SURROUNDING FIRE
CONDITIONS IF SAFE.EXPLAN OF CARCIN:(NTP,1991).CR(
VI):KNOWN TO
CAUSE CANCER (CAL PROP 65,1987).CERTAIN WATER INSOLUBLE CR(VI)
COMPO UNDS:ACGIH A1=KNOWN HUMAN CARCINOGEN (1993).

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

Boiling Pt:B.P. Text:NOT KNOWN
Melt/Freeze Pt:M.P/F.P Text:NOT KNOWN
Decomp Temp:Decomp Text:NOT KNOWN
Vapor Pres:NOT KNOWN
Vapor Density:NOT KNOWN
Spec Gravity:NOT KNOWN
Evaporation Rate & Reference:NOT KNOWN
Solubility in Water:NOT KNOWN
Appearance and Odor:MANUFACTURED ARTICLE.SEALED EL

ELECTROEXPLOSIVE DEVICE
CONTAINS PRESSED MIXTURES.

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

Stability Indicator/Materials to Avoid: YES

FLAMMABLE LIQUIDS, STRONG ACIDS OR BASES.

Stability Condition to Avoid: FLAME, HIGH TEMP, ELECTROSTATIC

DISCHARGE, IMPACT, ELECTRICAL CURRENT OR RF ENERGY.

Hazardous Decomposition Products: FUMES OR RESIDUES: CARBON

MONOXIDE, CARBON DIOXIDE, NITROGEN OXIDES, CHLORINE, OXIDES OF ZIRCONIUM, BARIUM, CHROMIUM.

Conditions to Avoid Polymeri

zation: WILL NOT OCCUR.

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

Waste Disposal Methods: UNIT MAY ONLY BE DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL, STATE, & LOCAL REGULATIONS, AFTER COMPLETE FUNCTIONING BY TEST-FIRING AND/OR THERMAL TREATMENT IN APPROVED, PERMITTED FACILITY.

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