

OTTO FUEL II

MSDS Number

CDKKD

National Stock Number

1356-00-842-0630

Product Name

OTTO FUEL II

Manufacturer

NAVAL SURFACE WARFARE CENTER

Product Identification

Product ID: OTTO FUEL II

MSDS Date: 09/21/1994

FSC: 1356

NIIN: 00-842-0630

MSDS Number: CDKKD

Responsible Party

NAVAL SURFACE WARFARE CENTER

101 STRAUSS AVE

INDIAN HEAD , MD 20640-5035

US

Emergency Phone: 301-743-4438

Info Phone: 301-743-4659

Cage: JO160

Contractor

NAVAL SURFACE WARFARE CTR

INDIAN HEAD, MD 20640-5035

US

301-743-4924

Cage: 14083

Ingredients

1,2-PROPANEDIOL, DINITRATE; (PROPYLENE GLYCOL DINITRATE)

CAS: 6423-43-4

RTECS: TY6300000

Fraction By Weight: 76%

OSHA PEL0.05 PPM

ACGIH TLV: 0.05 PPM, S

2-NITRODIPHENYLAMINE; (2-NDPA)

Fraction By Weight: 1.5%

OSHA PEL0.05 PPM

ACGIH TLV: 0.05 PPM, S

DI-N-BUTYL SEBACATE (DBS)

CAS: 109-43-3

RTECS: VS1150000

Fraction By Weight: 22.5%

OSHA PELN/K

ACGIH TLV: N/K

CARDIOVASCULAR DISEASE, INCLUDING HEART ATTACKS,

RTECS: 9999999ZZ

DO NOT INDUCE VOMIT. QUALIFIED MED

RTECS: 9999999ZZ

GASTRIC LAVAGE. SEEK PROMPT MEDICAL ATTENTION. TREAT

RTECS: 9999999ZZ

MINOR SPILL BELOW. CONTAINERIZE ALL CONTAM MATL

RTECS: 9999999ZZ

CLEAN SAWDUST, RAGS/OTHER ABSORB MATL TO ABSORB THE

RTECS: 9999999ZZ

SPONGE DAMPENED WITH ETHYL OR ISOPROPYL ALCOHOL OR

RTECS: 9999999ZZ

BE USED FOR MFG OPERATIONS. WEAR RUBBER GLOVES

RTECS: 9999999ZZ

WEAR FLAME-RESIST COVERALLS,

RTECS: 9999999ZZ

MFG OPERATIONS. DURING OTTO FUEL II HNDLG

RTECS: 9999999ZZ

Hazards

LD50 LC50 Mixture:NONE SPECIFIED BY MANUFACTURER.

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

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

Health Hazards Acute and Chronic:ACUTE: INHAL: HDCH, NASAL CONGESTION, NAUS, DIZZ, DILATION OF BLOOD VESSELS, HYPOTENSION, DFCLTY

W/BALANCE, POSS HYPOTENSION, NARROWED PULSE PRESS, & OTHER SYMPS OF NARCOS. EYES: LOC IRRIT, DECRD VISU AL ACUITY, & MAY BE ABSORBED TO CAUSE SYSTEMATIC EFTS OF HDCH, NAUS, DIZZ, VOMIT, & OTHER SYMPS NOTED (EFTS OF OVEREXP)

Explanation of Carcinogenicity:NOT RELEVANT.

Effects of Overexposure:HLTH HAZ: UNDER INHAL. SKIN: LOC IRRIT & MAY BE ABSORBED THRU SKIN TO CAUSE SYSTEMATIC EFTS OF HDCH, NAUS, DIZZ, &

OTHER SYMPS NOTED UNDER INHAL. A YELLOWISH DISCOLORATION OF SKIN IN EXPOSED AREAS IS INDICATIVE OF POOR WORK PRACT & SUGGESTS SIGNIFICANT DERMAL CONT MAY HAVE OCCURRED. INGEST: LETHARGY, REDUCED (SUP DAT)
Medical Cond Aggravated by Exposure:NONE SPECIFIED BY MANUFACTURER.

First Aid

First Aid:INHAL: REMOVE TO FRESH AIR IMMED. IF BRTHG HAS STOPPED, GIVE ARTF RESP. SEEK PROMPT MED ATTN. EYES: WASH IMMED W/LGE AMTS OF WATER/SALINE SOLN, OCCAS LIFTING UPPER & LOWER LIDS, FOR AT LEAST 15 MIN. S EEK PROMPT MED ATTN. SKIN: REMOVE CONTAM CLTHG IMMED. WASH AFFECTED AREAS W/SOAP & WATER FOR AT LEAST 15 MIN. SEEK PROMPT MED ATTN IF IRRIT PERSISTS. DO NOT USE SOLVENTS TO REMOVE OTTO FUEL II.(ING 5)

Fire Fighting

Flash Point Method:COC
Flash Point:265F,129C
Extinguishing Media:FLOOD WITH WATER; IF NO WATER IS AVAILABLE, USE DRY CHEMICAL OR DIRT.
Fire Fighting Procedures:WEAR NIOSH APPRVD SCBA & FULL PROT EQUIP . DO NOT MOVE CONTRS IF EXPOS TO HEAT HAS OCCURRED. DO NOT FIGHT FIRE WHEN IT REACHES STOR AREA. (SUP DAT)
Unusual Fire/Explosion Hazard:FIRE AND EXPLOSION HAZARD. LOW FIRE HAZARD WHEN EXPOSED TO HEAT OR FLAME.

Accidental Release

Spill Release Procedures:MAJOR SPILL: SHUT OFF IGNIT SOURCES. NO SMKNG, FLAMES/FLARES IN HAZ AREA. EVACUATE AREA FOR 250 FEET IN ALL DIRECTIONS. KEEP UNNEC PEOPLE AWAY. REQUIRE USE OF NIOSH APPRVD RESP PROT & IMPERVIOUS CLTHG . CONFINE SPILL. USE SAME METH AS FOR (ING 7)
Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

Handling

Handling and Storage Precautions:AVOID CONTACT WITH HEAT, SPARKS, FLAMES, OR OTHER SOURCES OF IGNITION.
Other Precautions:STORE AWAY FROM INCOMPATIBLE MATERIALS. OBSERVE ALL FEDERAL, STATE, AND LOCAL REGULATIONS WHEN STORING THIS MATERIAL.

Exposure Controls

Respiratory Protection:NIOSH APPROVED FULL-FACE PRESSURE DEMAND SCBA IS REQUIRED IF AIRBORNE CONCENTRATION LEVELS EXCEED THE LIMITS ESTABLISHED BY THE NAVY.
Ventilation:LOCAL EXHAUST VENTILATION SYSTEM TO MEET THE EXPOSURE LIMITS. CONTACT LOCAL INDUSTRIAL HYGIENIST FOR GUIDANCE.
Protective Gloves:NITRILE BUNA-RUBB GLOVES SHALL (ING 10)
Eye Protection:ANSI APPRVD CHEM WORKERS GOGGLES .
Other Protective Equipment:ANSI APPRVD EMER EYEWASH & DELUGE SHOWER . AN IMPERVIOUS APRON MAY BE REQUIRED FOR SOME OPERATIONS. (ING 11)
Work Hygienic Practices:THERE SHOULD BE NO SMKNG/EATING IN WORKPLACE. THORO CLEAN/LAUNDER CLTHG SEPARATELY PRIOR TO REUSE.
Supplemental Safety and Health
FIRE FIGHT PROC: AVOID BRTHG DUSTS & FUMES. HAZ DECOMP PROD: DEPEND UPON CIRCUMSTANCES & CNDTNS OF COMBUST. EFTS OF OVEREXP: RESPONSE TO EXTERNAL STIMULI, LOW BLOOD PRESS, DIZZ, ABDOM CRAMPS, & VOMIT. CHRONIC: ALTHOUGH EPIDEMIOLOGIC EVIDENCE IS LIMITED, CHRONIC OVEREXP MAY BE ASSOC W/AN INCREASED RISK OF (ING 4)

Chemical Properties

Boiling Pt:B.P. Text:>250F,>121C
Melt/Freeze Pt:M.P/F.P Text:-18F,-28C
Vapor Pres:0.0877
Vapor Density:1.232
Spec Gravity:1.232 (H*20=1)
Solubility in Water:INSOLUBLE
Appearance and Odor:REDDISH-ORANGE LIQUID, WITH A DISAGREEABLE ODOR

Stability

Stability Indicator/Materials to Avoid: YES

ACIDS, OXIDIZERS, AND COMBUSTIBLES.

Stability Condition to Avoid: AVOID HEAT, SPARKS, OPEN FLAME, AND OTHER SOURCES OF IGNITION.

Hazardous Decomposition Products: DECOMP PRODS INCL CARBON MONOXIDE, HYDROGEN CYANIDE, OXIDES OF NITROGEN, & POSS OTHER MATLS. CONCS GENERATED (SUP DAT)

Disposal

Waste Disposal Methods: CONTAINERIZE SPILLED MATERIAL MUST BE DISPOSED OF AS A HAZARDOUS WASTE PER 40 CFR 262. DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS .

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