Product ID:FUEL OIL #1 MSDS Date:06/27/1991

FSC:9140

NIIN:00-286-5287

MSDS Number: BPBVZ === Responsible Party ===

Company Name: MONTANA REFINING CO

Address:1900 10TH STREET

City: GREAT FALLS

State:MT

ZIP:59414-1099 Country:US

Info Phone Num:406-761-4100

Emergency Phone Num:406-761-4100/800-424-9300(CHEMTREC)

С

AGE:6E335

=== Contractor Identification ===

Company Name: MONTANA REFINING CO

Address:1900 10TH ST Box:City:GREAT FALLS

State:MT

ZIP:59414-1099 Country:US

Phone: 406-761-4100/800-424-9300 (CHEMTREC)

CAGE:6E335

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

Ingred Name: KEROSENE (CONTAINING HYDROCARBON PETROLEUM DISTILLATES)

CAS:8008-20-6

RTECS #:OA5500000 Fraction by Wt: UNK

Other REC Limits: NONE SPECIFIED

OSHA PEL:100 PPM ACGIH TLV:100 PPM 9091

Ingred Name:BENZENE (SARA II

I); >100 PPM (TRACE LEVELS) BENZENE PER
API WASH AND MAJOR FORMULATORS. BUT NOT LISTED IN THE MSDS'S

CAS:71-43-2

RTECS #:CY1400000 Fraction by Wt: 0.01%

Other REC Limits:NONE SPECIFIED OSHA PEL:1PPM/5STEL;1910.1028

ACGIH TLV:10 PPM; A2; 9293

EPA Rpt Qty:10 LBS DOT Rpt Qty:10 LBS

Ingred Name: NAPHTHALENE (SARA III)

CAS:91-20-3

RTECS #:QJ0525000 Fraction by Wt: UNKNOW

Other REC Limits: NONE SPECIFIED

OSHA PEL:10 PPM/15 STEL

ACGIH TLV:10 PPM/15 STEL; 9293

EPA Rpt Qty:100 LBS DOT Rpt Qty:100 LBS

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

Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO

Health Hazards Acute and Chronic:ACUTE: PRODUCT IS MILDLY IRRITATING TO SKIN. ON INHALATION, IT MAY PRODUCE CENTRAL NERVOUS SYSTEM DEPRESSION, NARCOSIS. GREATER EXPOSURE MAY CAUSE DIZZINESS, SLURRED SPEECH, FLUSHED FACE, UNCONSCIOUSN ESS OR CONVULSIONS. CHRONIC:DERMATITIS, PNEUMONITIS, PULMONARY EDEMA

AND KIDNEY DAMAGE.

Explanation of Carcinogenicity:THE PRODUCT ITSELF HAS NOT SHOWN ANY EVIDENCE OF BEING CARCINOGENIC. BUT SAMPLES ANALYSIS REVEALED BENZENE >100PPM.

Effects of Overexposure:EYE:HIGH CONCENCENTRATION OF VAPORS CAUSE IRRITATION; SKIN: MAY CAUSE MILD IRRITATION, POSSIBLE DERMATITIS WITH PROLONGED AND/OR REPEATED CONTACT. INHALATION: RESPIRATORY TRACT IRRITATION, NAUSEA, DIZ ZINESS, HEADACHE, CONFUSION, BLURRED VISION. INGESTED: GASTROINTESTINAL IRRITATION, NAU

SEA, VOMITING.ASPIRATION HAZARD! Medical Cond Aggravated by Exposure:PEOPLE WITH A SKIN DISORDER OR IMPARED PULMONARY FUNCTION SHOULD USE EXTRA CAUTION WHEN HANDLING OR USING THIS PRODUCT.
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First Aid:EYE:FLUSH W/WATER 15 MIN, HOLD LIDS OPEN. SKIN:WASH WITH SOAP & WATER. REMOVE CONTAMINATED CLOTHING AND LAUNDER BEFORE REUSE. INHALED:REMOVE TO FRESH AIR. RESTORE BREATHING IF NECESSARY. INGESTED:DO N OT IN DUCE VOMITING. GIVE 2 LARGE GLASSES OF MILK OR WATER AND GET IMMEDIATE MEDICAL CARE. GIVE NOTHING BY MOUTH IF UNCONSCIOUS. IF IRRITATION PERSISTS OR IS SEVERE, SEE A DOCTOR.
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Flash Point Method:TOC Flash Point:>110F,>43C Lower Limits:0.7% Upper Limits:5.0% Extinguishing Media:USE CARBON DIOXIDE, FOAM, DRY CHEMICAL, HALON. Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPMENT AND A FULL FACED SCBA. EVACUA TE AREA. USE WATER SPRAY TO COOL FIRE EXPOSED CONTAINERS COOL, FLUSH SPILL/VAPORS AWAY. Unusual Fire/Explosion Hazard:NONE GIVEN BY MANUFACTURER (SUPPLIER). HMIS:COMBUSTION OR HEAT OF FIRE MAY PRODUCE HAZARDOUS DECOMPOSITION PRODUCTS AND VAPORS.VAPORS MAY FLASHBACK.
========= Accidental Release Measures ==========
Spill Release Procedures:ELIMINATE SOURCES OF IGNITION. MINOR: ABSORB

Spill Release Procedures: ELIMINATE SOURCES OF IGNITION. MINOR: ABSORB MATERIAL WITH CLAY, VERMICULITE, OR SIMILAR ABSORBENT MATERIAL. PLACE IN

DISPOSAL CONTAINERS. MAJOR: DIKE & CONTAIN SPILL. SHUT OFF LEAKS. REMOVE LIQUID BY VACUUM OR ABSORBENT. AVOID WASHING TO STORM SEWER

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

Handling and Storage Precautions: STORE IN A COOL, VENTILATED LOW FIRE RISK AREA. DETACHED STORAGE IS PREFERABLE.

Other Precautions:'EMPTY' CONTAINERS MAY CONTAIN RESIDUE OR VAPOR.
TREAT THEM WITH THE RESPECT DUE FULL ONES. DO NOT CUT,WELD,ETC. ON
THEM. GROUND CONTAINERS BEFOR

Respiratory Protection: RESPIRATOR WILL NOT NORMALLY BE NECESSARY. USE NIOSH/MSHA APPROVED AIR SUPPLIED RESPIRATOR OR RESPIRATOR FOR ORGANIC VAPOR IF EXPOSURE IS ABOVE THE TLV/PEL. SEE 29 CFR 1910.134 FOR REGULATIONS PERTAIN ING TO RESPIRATOR USE.

Ventilation: LOCAL AND MECHANICAL EXHAUST RECOMMENDED.

Protective Gloves: NEOPRENE, NITRIL

E, OR PVC

Eye Protection: USE CHEMICAL SAFETY GOGGLES & FACESHIELD

Other Protective Equipment: EYE WASH STATION & SAFETY SHOWER. WEAR IMPERVIOUS CLOTHING WHEN SPLASHING IS LIKELY.

Work Hygienic Practices:USE GOOD CHEMICAL HYGIENE PRACTICES. AVOID PROLONGED/REPEATED CONTACT. DO NOT EAT, DRINK OR SMOKE IN WORK AREA.

Supplemental Safety and Health

PER API, WASHINGTON, DC AND FEW OF MAJOR FORMULATORS, DIESEL FUELS WERE FOUND TO HAVE TRACE LEVELS OF BENZENE. TYPICAL SAMPLE ANALYSIS

SHOWED 100 TO 250 PPM OF BENZENE.

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

HCC:F4

Boiling Pt:B.P. Text:>300F,>149C

Vapor Pres:5 MMHG@100

Vapor Density:4.5 Spec Gravity:0.8

Evaporation Rate & Evaporation R

Solubility in Water: NEGLIGIBLE

Appearance and Odor:CLEAR TO YELLOW LIQUID WITH CHARACTERISTIC HYDROCARBON SMELL.

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

Stability Indicator/Materials to Avoid:YES STRONG OXIDIZING AGENTS Stabili

ty Condition to Avoid:HIGH HEAT, OPEN FLAMES AND OTHER SOURCES OF IGNITION

Hazardous Decomposition Products: CARBON MONOXIDE, CARBON DIOXIDE AND OTHER PETROLEUM COMBUSTION PRODUCTS. MAY EMIT SULFUR DIOXIDE DEPENDING ON SULFUR.

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

Waste Disposal Methods:DISPOSE I/A/W ALL FEDERAL, STATE AND LOCAL REGULATIONS. MANUFACTURER MAKES NO SUGGESTIONS AS TO METHOD OF DISPOSAL. HMIS SUGGESTS INCINERATION MAY BE THE BEST DI SPOSAL

METHOD. RCRA HAZ WASTE #S D001, D018 (BECAUSE OF BENZENE IN DIESEL FUELS).RECYCLE.

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