

MONTANA REFINING CO -- FUEL OIL #1 -- 9140-00-286-5287

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

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)

C

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, UNCONSCIOUSNESS 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 CONCENTRATION OF VAPORS CAUSE  
IRRITATION; SKIN: MAY CAUSE MILD IRRITATION, POSSIBLE DERMATITIS  
WITH PROLONGED AND/OR REPEATED CONTACT. INHALATION: RESPIRATORY  
TRACT IRRITATION, NAUSEA, DIZZINESS, HEADACHE,CONFUSION,BLURRED  
VISION. INGESTED: GASTROINTESTINAL IRRITATION, NAU

SEA,  
VOMITING.ASPIRATION HAZARD!  
Medical Cond Aggravated by Exposure:PEOPLE WITH A SKIN DISORDER OR  
IMPAIRED PULMONARY FUNCTION SHOULD USE EXTRA CAUTION WHEN HANDLING  
OR USING THIS PRODUCT.

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

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 NOT INDUCE 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.

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

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. EVACUATE 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  
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 BEFORE

E TRANSFERRING LIQUID. AVOID HAVING  
OPEN ELECTRICAL EQUIPMENT IN VAPOR AREAS.

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

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 PERTAINING TO RESPIRATOR USE.

Ventilation: LOCAL AND MECHANICAL EXHAUST RECOMMENDED.

Protective Gloves: NEOPRENE, NITRILE,  
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 & Reference: NIL

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

Stability

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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