

SHELL OIL CO -- TURBINE FUEL JP-5 -- 9130-00-273-2379

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

Product ID:TURBINE FUEL JP-5

MSDS Date:05/07/1993

FSC:9130

NIIN:00-273-2379

MSDS Number: BVFRL

=== Responsible Party ===

Company Name:SHELL OIL CO

Address:1 SHELL PLAZA

Box:2463

City:HOUSTON

State:TX

ZIP:77001

Country:US

Info Phone Num:713-241-4819

Emergency Phone Num:713-473-9461/800-424-9300(CHEMTREC)

CAGE:

93508

=== Contractor Identification ===

Company Name:SHELL OIL CO

Address:1 SHELL PLAZA

Box:2463

City:HOUSTON

State:TX

ZIP:77001

Country:US

Phone:713-473-9461/800-424-9300(CHEMTREC)

CAGE:93508

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

Ingred Name:ALIPHATIC PETROLEUM SOLVENT

CAS:8008-20-6

RTECS #:OA5500000

Fraction by Wt: >96.5% %

Other REC Limits:NONE RECOMMENDED

Ingred Name:ADDITIVES

Fraction by Wt: < 0.5% %

Other REC Limits:NONE RECOMMENDED

Ingred Name:DIETHYLENE

GLYCOL MONOMETHYL ETHER
CAS:111-77-3
RTECS #:KL6125000
Fraction by Wt: 0.2% %
Other REC Limits:NONE RECOMMENDED

Ingred Name:NAPHTHALENE (SARA III)
CAS:91-20-3
RTECS #:QJ0525000
Fraction by Wt: 0-3% %
Other REC Limits:NONE RECOMMENDED
OSHA PEL:10 PPM
ACGIH TLV:10 PPM/15 STEL; 9394
EPA Rpt Qty:100 LBS
DOT Rpt Qty:100 LBS

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

LD50 LC50 Mixture:NOT GIVEN FOR PRODUCT AS A WHOLE

Routes of Entry: Inhalation:YES Skin:YES Ingestion:Y

ES

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

Health Hazards Acute and Chronic:MAY BE MILDLY IRRITATING TO THE EYES.

PROLONGED OR REPEATED CONTACT MAY BE MORE IRRITATING. MAY BE MODERATELY IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT CAN CAUSE DEFATTING AND DRYING OF THE SKIN AND DERMATITIS.

INHALATION MAY BE IRRITATING TO UPPER RESPIRATORY TRACT. ASPIRATION HAZARD.

Explanation of Carcinogenicity:THIS COMPOUND CONTAINS NO INGREDIENTS AT CONCENTRATIONS

OF 0.1% OR GREATER THAT ARE CARCINOGENS OR SUSPECT CARCINOGENS.

Effects of Overexposure:EYE IRRITATION, SKIN IRRITATION, DERMATITIS,

UPPER RESPIRATORY TRACT IRRITATION, NAUSEA, VOMITING, DIARRHEA.

EARLY TO MODERATE CENTRAL NERVOUS SYSTEM DEPRESSION AS EVIDENCED BY GIDDINESS, HEADACHE, DIZZINESS AND NAUSEA.

Medical Cond Aggravated by Exposure:PRE-EXISTING SKIN AND/OR

RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

===== First Aid M

Measures =====

First Aid:EYES: FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED CLOTHING. WASH WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. INHALATION: REMOVE TO FRESH AIR. RESTORE BREATHING. GET MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING. GET MEDICAL ATTENTION. IF VOMITING OCCURS, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION.

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

Flash Point Method:PMCC

Flash Point:140F,60C

Lower Limits:0.7 %

Upper Limits:5.0 %

Extinguishing Media:WATER FOG, DRY CHEMICAL, CARBON DIOXIDE, FOAM. DO NOT USE A DIRECT STREAM OF WATER.

Fire Fighting Procedures:FIRE FIGHTERS SHOULD USE NIOSH APPROVED SCBA & FULL PROTECTIVE EQUIPMENT WHEN FIGHTING CHEMICAL FIRE. USE WATER SPRAY TO COOL NEARBY CONTAINERS EXPOSED TO FIRE.

Unusual Fire/Explosion Hazard:DO NOT USE DIRECT STREAM OF WATER ON FIRE. TOXIC GASES ARE RELEASED DURING COMBUSTION.

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

Spill Release Procedures:ELIMINATE SOURCES OF IGNITION. EVACUATE AREA. WEAR PROPER PERSONAL PROTECTIVE EQUIPMENT. CONTAIN SPILL. STOP LEAK IF CAN DO SO WITHOUT RISK. ABSORB LIQUID WITH SUITABLE ABSORBENT MATERIAL. COLLECT FOR DISPOSAL.

Neutralizing Agent:NONE SPECIFIED BY MANUFACTURER.

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

Handling and Storage

Precautions:STORE IN A COOL, DRY PLACE WITH ADEQUATE VENTILATION. KEEP AWAY FROM OPEN FLAMES AND HIGH TEMPERATURES.

Other Precautions:AVOID SKIN CONTACT. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. VAPORS MAY ACCUMULATE AND TRAVEL TO IGNITION SOURCES DISTANT FROM THE HANDLING SITE.

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

Respiratory Protection:IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS, USE A NIOSH APPROVED RESPIRATOR OR AN

AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS.

Ventilation:LOCAL EXHAUST AND MECHANICAL (GENERAL) VENTILATION TO MAINTAIN EXPOSURE LEVELS.

Protective Gloves:IMPERVIOUS

Eye Protection:SAFETY GLASSES OR GOGGLES

Other Protective Equipment:PROTECTIVE CLOTHING AS REQUIRED TO AVOID SKIN CONTACT. AN EMERGENCY EYE WASH STATION AND SHOWER SHOULD BE AVAILABLE.

Work Hygienic Practices:WASH WITH SOAP AND WATER AFTER HANDLING PRODUCT AND BEFORE EATING DRINKING OR SMOKING.

Supplemental Safety and Health

EMPTY CONTAINERS RETAIN PRODUCT RESIDUE AND CAN BE DANGEROUS. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE.

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

HCC:F4

Boiling Pt:B.P. Text:320F,160C

Melt/Freeze Pt:M.P/F.P Text:-51F,-46C

Vapor Pres:NOT GIVEN

Vapor Density:> 1

Spec Gravity:0.81

Evaporation Rate & Reference:NOT GIVEN

Solubility in Water:NEGLIGIBLE

Appearance and Odor:CLEAR, WHITE LIQUID, KEROSENE ODOR

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS

Stability Condition to Avoid:HEAT, OPEN FLAME, SPARKS

Hazardous Decomposition Products:A COMPLEX MIXTURE OF AIRBORNE SOLID, LIQUID, PARTICULATES AND GASES WILL EVOLVE-CARBON MONOXIDE, OTHER UNIDENTIFIED CMPD

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

Waste Disposal Methods:PREVENT WASTE FROM CONTAMINATING SURROUNDING ENVIRONMENT. DISCARD ANY PRODUCT, RESIDUE, DISPOSAL CONTAINER OR LINER IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.

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 dis

claims 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.