

PHILLIPS 66 COMPANY -- N-HEPTANE,PRIMARY REFERENCE FUEL (PRF) -- 6810-00-470-4631

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

Product ID:N-HEPTANE,PRIMARY REFERENCE FUEL (PRF)

MSDS Date:10/31/1995

FSC:6810

NIIN:00-470-4631

MSDS Number: CGMVJ

=== Responsible Party ===

Company Name:PHILLIPS 66 COMPANY

Address:758 ADAMS BLDG

City:BARTLESVILLE

State:OK

ZIP:74004

Country:US

Info Phone Num:918-661-9091/7297 (MSDS)

Emergency Phone Num:918-661-8118

Resp. Party Other MSDS Num.:

P07444

CAGE:46935

=== Contractor Identification ===

Company Name:HOC INDUSTRIES, INC

Address:3511 N. OHIO

Box:2609

City:WICHITA

State:KS

ZIP:67219

Country:US

Phone:316-838-4663

CAGE:0A9L8

Company Name:PHILLIPS PETROLEUM CO

Address:613 ADAMS

Box:City:BARTLESVILLE

State:OK

ZIP:74004

Country:US

Phone:800-234-6603

Contract Num:SPO450-00-M-SH52

CAGE:46935

Company Name:PHOENIX INDUSTRIES INC

Address:1519 CHAMBERLAYNE PARKWAY

Box:City:RICHMOND

State:VA

ZIP:23222

Country:US

Phone:804-264-5183/FAX: 264-5

535

Contract Num:SP0450-00-M-D041

CAGE:0YED2

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

Ingred Name:N-HEPTANE

CAS:142-82-5

RTECS #:MI7700000

= Wt:100.

Other REC Limits:NONE RECOMMENDED

OSHA PEL:400 PPM

ACGIH TLV:400 PPM/500STEL;9596

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

LD50 LC50 Mixture:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

Health Hazards Acute and Chronic:EYE: MAY CAUSE MILD I

RRITATION. SKIN:

MAY CAUSE BURNING & ITCHING, ESPECIALLY AFTER PROLONGED & DIRECT CONTACT WITH LIQUID. INHALATION: MAY CAUSE IRRITATION TO MUCOUS MEMBRANES OF RESPIRATORY TRACT, N AUSEA, LOSS OF APPETITE, LASSITUDE, LIGHT-HEADENESS, GIDDINESS, DIZZINESS, & INCOORDINATION. RESPIRATORY ARREST, CONVULSIONS, SEMI-CONSCIOUSNESS OR UNCONSCIOUSNESS MAY RESULT FROM EXTREME EXPOSURE. I NGESTION: MAY CAUSE WEAKNESS AND GASTROINTESTINAL TRACT IRRITATION. IF SWALLOWED, MAY B

E ASPIRATED RESULTING IN INFLAMMATION & POSSIBLE FLUID ACCUMULATION IN THE LUNGS.

Explanation of Carcinogenicity:NO DATA PROVIDED BY RESPONSIBLE PARTY.

Effects of Overexposure:IRRITATION, DRY SKIN, TEARING, BLURRED VISION, REDNESS, DEFATting, HEADACHE, DIZZINESS, WEAKNESS, FATIGUE, NAUSEA, VOMITING, DIARRHEA, UNCONSCIOUSNESS.

Medical Cond Aggravated by Exposure:INDIVIDUALS WITH PRE-EXISTING DISEASES OF THE EYE, SKIN, RESPIRATORY TRACT, CNS MAY HAVE INCREASED SUSCEPTIBILITY TO THE TOXICITY OF EXCESSIVE EXPOSURES.

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

First Aid:GET MEDICAL HELP IF SYMPTOMS PERSIST. INHALED: MOVE TO FRESH AIR. IF BREATHING DIFFICULT GIVE OXYGEN. IF BREATHING CEASES, GIVE ARTIFICIAL RESPIRATION FOLLOWED BY OXYGEN. EYES: IMMEDIATELY FLUSH WITH WATER FOR 15 MINUTES. HOLD EYELIDS OPEN. SKIN:WASH WITH SOAP & WATER FOR 15 MINUTES. INGESTION: DO NOT INDUCE VOMITING. SEEK IMMEDIATE MEDICAL ATTENTION. NOTE T

O PHYSICIAN: GASTRIC LAVAGE
USING A CUF FED ENDOTRACHEAL TUBE MAY BE PERFORMED AT YOUR
DISCRETION.

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

Flash Point Method:TCC

Flash Point:=-3.7C, 25.F

ASTM D56

Lower Limits:1.0

Upper Limits:7.0

Extinguishing Media:DRY CHEMICAL, FOAM, CARBON DIOXIDE

Fire Fighting Procedures:EVACUATE AREA. SHUT OFF SOURCE. USE

SELF-CONTAINED BREATHING APPARATUS AND OTHER PROTECTIVE EQUIPMENT
AND/OR GARMENTS IF CONDITIONS WARRANT. WATER FOG OR SPRAY MAY BE

USED TO COOL EXPOSED CONTAINERS/EQUIPMENT. DO NOT SPRAY DIRECTLY
ON FIRE, PRODUCT WILL FLOAT AND COULD BE REIGNITED ON SURFACE OF
WATER.

Unusual Fire/Explosion Hazard:CARBON OXIDES FORMED WHEN BURNED. HIGHLY
FLAMMABLE VAPORS WHICH ARE HEAVIER THAN AIR MAY ACCUMULATE IN LOW
AREAS AND/OR SPREAD ALONG GROUND AWAY FROM HANDLING SITE.

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

Spill Release Procedures:EVACUATE UNNECESSARY PERSONNEL

LEAVE AREA

APPROPRIATE PPE. SHUT OFF SOURCE IF POSSIBLE & CONTAIN SPILL.

PROTECT FROM IGNITION. KEEP FROM WATER SOURCES & SEWERS. ABSORB IN
DRY, INERT MATERIAL. TRANSFER TO DISPOSAL DRUMS USING NON-SPARKING
EQUIPMENT.

Neutralizing Agent:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

Handling and Storage Precautions:STORE IN TIGHTLY CLOSED CONTAINERS IN
WELL-VENTILATED AREA AWAY FROM IGNITION SOURCES & STRONG OXIDIZERS.

BOND & GROUND DURING TRANSFER. HEPTANE WILL ATTACK SOME FORMS OF
PLASTIC & RUBBER.

Other Precautions:AVOID CONTACT WITH EYES, SKIN, CLOTHING. AVOID
BREATHING VAPORS, MIST, FUME, DUST. DO NOT SWALLOW, MAY BE
ASPIRATED INTO LUNGS. WEAR PPE AND APPROPRIATE GARMENTS. WASH
THOROUGHLY AFTER HANDLING. LAUNDE R CONTAMINATED CLOTHES BEFORE
REUSE. USE WITH ADEQUATE VENTILATION.

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

Respiratory Protection:NOT GENERAL

LLY REQUIRED UNLESS NEEDED TO PREVENT
RESPIRATORY IRRITATION. IF EXPOSURE TO CONCENTRATIONS ABOVE THE
RECOMMENDED EXPOSURE LIMIT IS POSSIBLE, USE NIOSH/MSHA-APPROVED
SELF-CONTAINED BREATHING APPARATUS (SCBA).
Ventilation:USE ADEQUATE VENTILATION TO CONTROL CONCENTRATION BELOW
RECOMMENDED EXPOSURE LIMITS.
Protective Gloves:USE GLOVES RESISTANT TO THE MATERIAL BEING USED
(BUNA-N OR POLYVINYL ALCOHOL)
Eye Protection:SAFETY GLASSES WITH SIDE SHIELDS. CHEM GOGGLES/FACE
SHIELD
FOR SPLASH PROTECT
Other Protective Equipment:PPE RECOMMENDED IS BASED ON NORMAL USES &
CONDITIONS. FOR SPECIAL/UNUSUAL CONDITIONS, CONSULT INDUSTRIAL
HYGIENIST OR OTHER EXPERTS.
Work Hygienic Practices:AVOID CONTACT WITH EYES, SKIN, CLOTHING. AVOID
BREATHING VAPORS, MIST, FUME, DUST. WASH THOROUGHLY AFTER HANDLING.
LAUNDER CONTAMINATED CLOTHING BEFORE REUSE.
Supplemental Safety and Health
NO DATA PROVIDED BY RESPONSIBLE PARTY.

===== Physical/Chemical Properties
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HCC:F2
Boiling Pt:=98.3C, 209.F
Vapor Pres:83 MM HG @ 100F (38C)
Vapor Density:3.4
Spec Gravity:0.688 @ 60/60F
Evaporation Rate & Reference:>1 (BUTYL ACETATE=1)
Solubility in Water:NEGLIGIBLE
Appearance and Odor:CLEAR LIQUID - MILD, SWEET ODOR
Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES
STRONG OXIDIZING AGENTS, OXYGEN
Hazardous Decomposition Products:CARBON OXIDES FORMED W
HEN BURNING

===== Toxicological Information =====

Toxicological Information:SUBCHRONIC AND CHRONIC EFFECTS OF
OVEREXPOSURE: NO KNOWN APPLICABLE INFORMATION. OTHER HEALTH
EFFECTS: NO KNOWN APPLICABLE INFORMATION. TARGET ORGAN TOXIN: LUNG
ASPIRATION HAZARD.

===== Ecological Information =====

Ecological:NO DATA PROVIDED BY RESPONSIBLE PARTY.

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

Waste Disp

Disposal Methods:INSURE CONFORMITY WITH ALL APPLICABLE DISPOSAL REGULATIONS. INCINERATE OR PLACE IN PERMITTED WASTE MANAGEMENT FACILITY.

===== MSDS Transport Information =====

Transport Information:SHIPPING NAME: HEPTANES. HAZARD CLASS: 3 (FLAMMABLE LIQUID). ID NUMBER: UN1206. PACKING GROUP II. MARKING: HEPTANES, UN1206. LABEL: FLAMMABLE LIQUID. PLACARD: FLAMMABLE/1206. SHIPPING DESCRIPTION: HEP TANES, 3, UN1206, PG II. PACKAGING REFERENCES: 49 CFR 173.150, 173.202, 173.242.

===== Regulatory Information =====

SARA Title III Information:AS OF THE PREPARATION DATE, THIS PRODUCT DID NOT CONTAIN A CHEMICAL OR CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT O F 1986 AND 40 CFR PART 372.

Federal Regulatory Information:RCRA CLASSIFICATION: IGNITABLE (D001). PRIOR TO DISPOSAL CONTACT YOUR ENVIRONMENTAL CONTACT TO DETERMINE IF TCLP (EPA TEST METHOD 1311) IS REQUIRED. REFERENCE 40 CFR PART 261. HAZARD CLASSIFICATION: T HIS PRODUCT MEETS THE FOLLOWING HAZARD DEFINITIONS AS DEFINED BY THE OCCUPATIONAL SAFETY AND HEALTH HAZARD COMMUNICATION STANDARD (29 CFR SECTION 1910.1200): FLAMMABLE LIQUID, HEALTH HAZARD (SECTION F [ACUTE/CHRONIC]).

State Regulatory Information:NO DATA PROVIDED BY RESPONSIBLE PARTY.

===== Other Information =====

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