

PHIBRO ENERGY USA INC -- TOLUENE -- 6810-00-281-2002

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

Product ID:TOLUENE

MSDS Date:12/19/1995

FSC:6810

NIIN:00-281-2002

MSDS Number: BTRTZ

=== Responsible Party ===

Company Name:PHIBRO ENERGY USA INC

Address:500 DALLAS AVE SUITE 3200

City:HOUSTON

State:TX

ZIP:77002

Country:US

Info Phone Num:713-923-6641

Emergency Phone Num:713-797-0395

Preparer's Name:RON LOUVIER

Chemtrec Ind/Phone:(800)424-9300

CAGE:0V310

=== Contractor Identification ===

Company Name:CHEMICAL SPECIALISTS AND DEVELOPMENT INC

Address:2210 HACKBERRY LN

Box:687

City:CONROE

State:TX

ZIP:77305

Country:US

Phone:409-756-1065

CAGE:4N760

Company Name:PHIBRO ENERGY USA INC

Address:500 DALLAS AVE SUITE 3200

Box:City:HOUSTON

State:TX

ZIP:77002

Country:US

Phone:713-923-6641, CHEMTREC800-424-9300

Contract Num:SP0450-99-M-NE18

CAGE:0V310

Company Name:STARTEX CHEMICAL INC

Address:5 HACKBERRY LANE

Box:

3087  
City:CONROE  
State:TX  
ZIP:77305  
Country:US  
Phone:409-539-6244  
CAGE:0YFV5

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Composition/Information on Ingredients  
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Ingred Name:TOLUENE (SARA 313) (CERCLA)  
CAS:108-88-3  
RTECS #:XS5250000  
Fraction by Wt: >99%  
Other REC Limits:NONE RECOMMENDED  
OSHA PEL:200 PPM; Z-2  
ACGIH TLV:S, 50 PPM; 9596  
EPA Rpt Qty:1000 LBS  
DOT Rpt Qty:1000 LBS

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Hazards Identification  
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LD50 LC50 Mixture:ORAL LD50 (RAT) IS 636MG/KG  
Routes of Entry: In  
halation:YES Skin:YES Ingestion:YES  
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO  
Health Hazards Acute and Chronic:EYES: MAY CAUSE SEVERE EYE IRRITATION,  
AND CONJUNCTIVITIS. SKIN: PROLONGED OR REPEATED CONTACT MAY CAUSE  
MODERATE IRRITATION DEFATTING, INFLAMMATION, DERMATITIS, AND  
POSSIBLE SECONDARY INFECTION. HIGH PRESSURE SKIN INJECTIONS ARE  
SERIOUS MEDICAL EMERGENCIES. INJURY MAY NOT APPEAR SERIOUS AT  
FIRST. WITHIN A FEW HOURS, TISSUES WILL BECOME SWOLLEN, DISCOLOR  
ED,  
AND EXTREMELY PAINFUL. INHALATION: NASAL AND RESPIRATORY TRACT  
IRRITATION, CENTRAL NERVOUS SYSTEM EFFECTS, ANEMIA AND IRREGULAR  
HEART RHYTHM. INGESTION: MAY BE HARMFUL OR FATAL IF SWALLOWED. MAY  
CAUSE NAUSEA, VOMITING, DIARRHEA, RESTLESSNES S, CENTRAL NERVOUS  
SYSTEM EFFECTS.  
Effects of Overexposure:EYES: SEVERE IRRITATION, REDNESS, TEARING,  
BLURRED VISION, AND CONJUNCTIVITIS. SKIN: IRRITATION, DEFATTING,  
REDNESS, ITCHING, INFLAMMATION, DERMATITIS, AND POSSIBLE SE

CONDARY

INFECTION. INHALATION: NA SAL AND RESPIRATORY TRACT IRRITATION, CNS EFFECTS INCLUDING EXCITATION, EUPHORIA, CONTRACTED EYE PUPLES, DIZZINESS, DROWSINESS, BLURRED VISION, FATIGUE, NAUSEA, HEADACHE, LOSS OF REFLEXES, TREMORS, CONVULSIONS, SEIZURES, LOSS OF CONSCIOUSNESS, COMA, RESPIRATORY ARREST, SUDDEN DEATH, ANEMIA, IRREGULAR HEART RHYTHM, BEHAVIORAL CHANGES. INGESTION: NAUSEA, VOMITING, DIARRHEA, AND RESTLESSNESS.

Medical Cond Aggravated by Exposure:PRE-EXISTING

ING EYE, SKIN, HEART,

CENTRAL NERVOUS SYSTEM AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

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

First Aid:EYES: FLUSH WITH LARGE AMOUNTS OF WATER FOR 15 MINUTES. HOLD EYELIDS AWAY FROM EYEBALLS. GET MEDICAL ATTENTION IF PAIN OR REDNESS CONTINUES. SKIN: REMOVE CONTAMINATED CLOTHING. WASH EXPOSED SKIN AREA WITH SOAP AND WATER. IF IRRITATION PERSISTS, GET MEDICAL ATTENTION. GET IMMEDIATE MEDICAL ATTENTION FOR HIGH PRESSURE SKIN INJECTION. INHALATION: MOVE TO FRESH AIR. IF BREATHING DIFFICULT, GIVE OXYGEN. IF NOT BREATHING, GIVE CPR. GET MEDICAL ATTENTION. INGESTION: DO NOT INDUCE VOMITING. GIVE VEGETABLE OIL OR CHARCOAL SLURRY. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET IMMEDIATE MEDICAL ATTENTION.

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

Flash Point:=-4.4C, 40.F

Autoignition Temp:=-480.C, 896.F

Lower Limits

:1.2

Upper Limits:7.1

Extinguishing Media:DRY CHEMICAL, CARBON DIOXIDE, FOAM.

Fire Fighting Procedures:USE A SELF-CONTAINED BREATHING APPARATUS WITH FULL FACE MASK AND FULL PROTECTIVE EQUIPMENT. COOL FIRE EXPOSED CONTAINERS WITH WATER FOG.

Unusual Fire/Explosion Hazard:DANGEROUS WHEN EXPOSED TO HEAT OR FLAME. VAPORS ARE HEAVIER THAN AIR, CAN TRAVEL DISTANCES ALONG THE GROUND AND FLASHBACK AT THE SOURCE.

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

Spill R

Release Procedures: ELIMINATE IGNITION SOURCES. USE PROTECTIVE EQUIPMENT. VENTILATE AREA. CONTAIN SPILL. RECOVER BY VACUUMING. USE WATER SPRAY TO DISPERSE VAPORS. SOAK UP WITH INERT ABSORBANT. PLACE IN CONTAINER FOR DISPOSAL. PREVENT FROM ENTERING SEWERS, STORMDRAINS, DRAINAGE SYSTEMS, NATURAL WATERWAYS, NAVIGABLE WATERS, SHORELINES. CONTACT FIRE AUTHORITIES, FEDERAL, STATE, LOCAL AGENCIES, NATIONAL RESPONSE CENTER.

Neutralizing Agent: NONE APPLICABLE.

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= Handling and Storage =====

Handling and Storage Precautions: USE ONLY IN WELL VENTILATED AREA. KEEP AWAY FROM HEAT, SPARKS, AND FLAMES. DO NOT PRESSURIZE, CUT WELD, BRAZE, SOLDER, DRILL ON OR NEAR CONTAINER. "EMPTY" CONTAINER CONTAINS RESIDUE (LIQUID, VAPOR) AND MAY EXPLODE IN HEAT OF A FIRE. STORE IN A COOL, DRY, WELL-VENTILATED PLACE. FOR INDUSTRIAL USE ONLY.

Other Precautions: DO NOT WEAR CONTACT LENSES. GROUND CONTAINERS WHEN TRANSFERRING LIQUID; FLOWING HYDROCARBONS CAN BECOME ELECTROSTATICALLY CHARGED. EMPTY CONTAINERS MAY BE DANGEROUS; DISPOSE OF PROPERLY. KEEP OUT OF REACH OF CHILDREN. NEVER SIPHON BY MOUTH.

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

Respiratory Protection: WHERE ENVIRONMENTAL CONTROLS ARE LACKING OR IN ENCLOSED SPACES USE NIOSH EQUIPMENT. PROPER RESPIRATOR SELECTION SHOULD BE DETERMINED BY ADEQUATELY TRAINED PERSONNEL, BASED ON THE CONTAMINANTS, THE DEGREE OF POTENTIAL EX

POSURE AND PUBLISHED RESPIRATORY PROTECTION FACTORS. THIS EQUIPMENT SHOULD BE AVAILABLE FOR NONROUTINE AND EMERGENCY USE.

Ventilation: IN CONFINED SPACE, MECHANICAL VENTILATION MAY BE NECESSARY TO REDUCE VAPOR CONCENTRATIONS TO LEVELS BELOW THE ALLOWABLE EXPOSURE LIMITS.

Protective Gloves: NEOPRENE, NITRILE-BUTADIENE RUBBER.

Eye Protection: SAFETY GLASSES OR CHEMICAL SPLASH GOGGLES.

Other Protective Equipment: PROTECTIVE CLOTHING, AS NEEDED. PROVIDE A LOCAL EYE WASH STATION AND SA

FETY SHOWER IN THE WORK AREA.

Work Hygienic Practices:WASH HANDS AFTER HANDLING AND BEFORE EATING,  
DRINKING, SMOKING, OR USING TOILET FACILITIES. LAUNDER CONTAMINATED  
CLOTHING BEFORE REUSE.

Supplemental Safety and Health

NONE

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

HCC:F2

Boiling Pt:=110.C, 230.F

Vapor Pres:54.3 @100F

Vapor Density:3.1(AIR=1)

Spec Gravity:0.87 @60F

Solubility in Water:NEGLIGIBLE (