

SHELL OIL COMPANY -- TOLUENE -- 6810-00-711-2185

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

Product ID:TOLUENE

MSDS Date:09/10/1995

FSC:6810

NIIN:00-711-2185

MSDS Number: BFMBX

=== Responsible Party ===

Company Name:SHELL OIL COMPANY

Address:HEALTH, SAFETY AND ENVIRONMENT

Box:4320

City:HOUSTON

State:TX

ZIP:77210

Country:US

Info Phone Num:713-241-4819/4141/2252 FAX -6511

Emergency Phone Num:713-473-9461/8

00-424-9300(CHEMTREC)

Preparer's Name:J.C. WILLETT

CAGE:54527

=== 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:SHELL OIL COMPANY

Address:Box:2463

City:HOUSTON

State:TX

ZIP:77210

Country:US

Phone:800-231-6950

CAGE:54527

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

Ingred Name:TOLUENE (SARA 313) (CERCLA)

CAS:108-88-3

RTECS #:XS5250000

Fract

ion by Wt: 100%
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

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

LD50 LC50 Mixture:ORAL LD50 (RAT) IS 5000 MG/KG
Routes of Entry: Inhalation:YES Skin:YES Ingestion:YES
Reports of Carcinogenicity:NTP:NO IARC:NO OSHA:NO
Health Hazards Acute and Chronic:ACUTE:IRRITATION OF EYES, SKIN,
RESPIRATORY OR G.I.TRACTS; CNS EFFECTS. BURNS OF EYES/SKIN

POSSIBLE. CHRONIC:DRYING OF SKIN, DEFATTING OR DERMATITIS; ANEMIA,
LIVER OR KIDNEY DAMAGE.

Explanation of Carcinogenicity:NO INGREDIENT OF A CONCENTRATION OF 0.1%
OR GREATER IS LISTED AS A CARCINOGEN OR SUSPECTED CARCINOGEN.
Effects of Overexposure:INHALATION: COUGHING, WHEEZING, SHORTNESS OF
BREATH, DROWSINESS, DIZZINESS, HEADACHE. EYES: REDNESS, TEARING,
BLURRED VISION. SKIN: REDNESS, BURNS, RASH, ITCHING. INGESTION:
NAUSEA, VOMITING, DIARRHEA .

Medical Cond Aggravated by
Exposure:PERSONS WITH A HISTORY OF AILMENTS
OR WITH A PRE-EXISTING DISEASE INVOLVING THE LIVER OR KIDNEY MAY BE
AT INCREASED RISK FROM EXPOSURE.

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

First Aid:INHALATION:REMOVE TO FRESH AIR. RESUSCITATE IF NOT BREATHING.
GET MEDICAL ATTENTION. EYES:IMMEDIATELY FLUSH WITH PLENTY OF WATER
FOR 15 MINUTES HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN:
REMOV E CONTAMINATED CLOTHING. WASH WITH SOAPAND WATER. IF
IRRITATION PERSISTS, GET MEDICAL ADVICE. INGESTION:DO NOT INDUCE
VOMITING. GIVE NOTHING BY MOUTH IF UNCONSCIOUS. GET IMMEDIATE
MEDICAL ATTENTION.

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

Flash Point Method:TCC
Flash Point:=4.4C, 40.F
Lower Limits:1%
Upper Limits:7%
Extinguishing Media:DRY CHEMICAL, FOAM, OR CARBON DOXIDE. WATER MAY BE
USED TO SUPPRESS VAPORS OR FLUSH LIQUID FROM EXPOSURES.
Fire Fighting Procedures:WEAR FIRE FIGHTING PROTECTIVE EQUIPM

ENT AND A

FULL FACED SELF CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER SPRAY. CONTAIN RUNOFF.

Unusual Fire/Explosion Hazard:FLASHBACK ALONG VAPOR TRAIL MAY OCCUR. VAPOR MAY EXPLODE, IF IGNITED IN AN ENCLOSED AREA.

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

Spill Release Procedures:REMOVE ALL SOURCES OF IGNITION. USE NON-SPARKING TOOLS. USE PROPER PERSONAL PROTECTION. CONTAIN FREE MATERIAL IF POSSIBLE. USE SUITABLE INERT ABSORBENT MATERIAL AND RECOVER FOR PROPER DISPOSAL IN AN APPROVED CONTAINER. DO NOT FLUSH TO SEWER.
Neutralizing Agent:NOT APPLICABLE.

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

Handling and Storage Precautions:STORE IN A COOL, DRY, WELL VENTILATED AREA. KEEP CONTAINERS TIGHTLY CLOSED WHEN NOT IN USE. PROTECT CONTAINERS FROM PHYSICAL DAMAGE.
Other Precautions:STORE OUTSIDE IN A STORAGE LOCKER. STORE AWAY FROM OXIDIZING MATERIALS. BOND AND GROUND DURING TRANSFER OPERATIONS.
USE NON-SPARKING TOOLS WHEN HANDLING. STORE IN NO SMOKING AREAS.

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

Respiratory Protection:USE NIOSH/MSHA APPROVED RESPIRATOR AS REQUIRED IF ABOVE PEL/TLV OR SCBA IN AN ENCLOSED AREA.
Ventilation:LOCAL/GENERAL TO MAINTAIN PEL/TLV.
Protective Gloves:NEOPRENE, NITRILE, OR NATURAL RUBBER
Eye Protection:SAFETY GOGGLES WITH OPTIONAL FACE SHIELD
Other Protective Equipment:EYE WASH STATION AND SAFETY SHOWERS, WORK CLOTHING AND APRON AS REQUIRED.
Work Hygienic Practices:OBSERVE GOOD PERSONAL HYGIENE PRACTICES AND RECOMMENDED PROCEDURES. DO NOT WEAR CONTAMINATED CLOTHING OR FOOTWEAR.
Supplemental Safety and Health
AVOID PROLONGED OR REPEATED EXPOSURE. DO NOT GET ON SKIN OR IN EYES. DO NOT BREATHE VAPORS OR MISTS.

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

HCC:F2
Boiling Pt:=110.6C, 231.F
Melt/Freeze Pt:=-95.C, -139.F
Vapor Pres:22
Vapor Density:3.2
Spec Gra

vity:0.87

Evaporation Rate & Reference:2.0 (N-BUTYL ACETATE=1)

Solubility in Water:NEGLIGIBLE

Appearance and Odor:CLEAR, COLORLESS LIQUID WITH AROMATIC BENZENE-LIKE ODOR.

Percent Volatiles by Volume:100

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

Stability Indicator/Materials to Avoid:YES

STRONG OXIDIZING AGENTS, CONCENTRATED NITRIC OR SULFURIC ACID, HALOGENS OR MOLTEN SULPHUR, CERTAIN PLASTICS OR RUBBERS.

Stability Condition to Avoid:HIGH HEAT, OPEN FLAMES

AND OTHER SOURCES

OF IGNITION

Hazardous Decomposition Products:CARBON MONOXIDE, CARBON DIOXIDE AND OTHER UNIDENTIFIED COMPONENTS.

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

Waste Disposal Methods:DISPOSAL MUST BE MADE IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL LAWS AND REGULATIONS.

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