

SHELL OIL COMPANY, PRODUCT SAFETY AND COMPLIANCE -- SHELL CYCLO (R) 150 AROMATIC SOLVENT -- 6810-00-244-7639

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

Product ID:SHELL CYCLO (R) 150 AROMATIC SOLVENT

MSDS Date:09/22/1995

FSC:6810

NIIN:00-244-7639

Status Code:A

MSDS Number: CJTWW

=== Responsible Party ===

Company Name:SHELL OIL COMPANY, PRODUCT SAFETY AND COMPLIANCE

Box:4320

City:HOUSTON

State:TX

ZIP:77210

Country:US

Info Phone Num:713-241-4819

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

Resp. Party Other MSDS Num.:SHELL MSDS NUMBER 7.866

Preparer's Name:J. C. WILLETT

Chemtrec Ind/Phone:(800)424-9300

CAGE:TO320

=== Contractor Identification ===

Company Name:EMULTEC INDUSTRIAL PRODUCTS INC

Address:1150 HAYDEN DR SUITE 100

Box:City:CHARROLLTON

State:TX

ZIP:75006

Country:US

Phone:972-417-1288

Contract Num:SPO450-99-M-NH94

CAGE:0WA27

Company Name:SHELL OIL COMPANY, PRODUCT SAFETY AND COMPLIANCE

Address:Box:4320

City:HOUSTON

State:TX

ZIP:77210

Country:US

Phone:713-241-4819

CAGE:TO320

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

Ingred Name:HEAVY AROMATIC NAPHTHA (SOLVENT NAPHTHA) CONTAINS INGREDIENTS #2 & #3.

CAS:64742-94-5

RTECS #:WF3100000

= Wt:100.

Other REC Limits:NONE RECOMMENDED

Ingred Name:PSEUDOCUMENE (1,2,4-TRIMETHYLBENZENE)

CAS:95-63-6

RTECS #:DC3325000

= Wt:10.

ed Name:NAPHTHALENE

CAS:91-20-3

RTECS #:QJ0525000

= Wt:6.

Other REC Limits:NONE RECOMMENDED

OSHA PEL:10 PPM

ACGIH TLV:10 PPM/15 STEL; 9596

EPA Rpt Qty:100 LBS

DOT Rpt Qty:100 LBS

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

LD50 LC50 Mixture:13.3 ML/KG

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

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

Health Hazards Acute and Chronic:EYE-LIQUID IS MINIMALLY IRRITATING TO
THE EYE. HIGH VAPOR CONCENTRATIONS M

AY BE IRRITATING. SKIN-LIQUID

IS MILDLY IRRITATING TO THE SKIN. PROLONGED OR REPEATED CONTACT CAN
RESULT IN DEFATTING & DRYING OF THE SKIN WHICH MAY RESULT IN SKIN
IRRITATION & DERMATITIS. INHALATION-HIGH VAPOR CONCENTRATIONS MAY
PRODUCE NOSE, THROAT & RESPIRATORY IRRITATION & MAY CAUSE CENTRAL
NERVOUS SYSTEM DEPRESSION. ING ESTION-INGESTION OF PRODUCT MAY
RESULT IN VOMITING: ASPIRATION OF VOMITUS INTO THE LUNGS MUST BE
AVOIDED AS EVEN SMALL QUANTITIES MAY RESULT IN

ASPIRATION

PNEUMONITIS.

Explanation of Carcinogenicity:NONE.

Effects of Overexposure:IRRITATION AS NOTED IN HEALTH HAZARDS. EARLY TO
MODERATE CNS DEPRESSION EVIDENCED BY GIDDINESS, HEADACHE,
DIZZINESS, NAUSEA; IN EXTREME CASES, UNCONSCIOUSNESS AND EVEN DEATH
MAY OCCUR. ASPIRATION P NEUMONITIS MAY BE EVIDENCED BY
COUGHING,LABORED BREATHING, AND CYANOSIS (BLUISH SKIN); IN SEVERE
CASES DEATH MAY OCCUR.

Medical Cond Aggravated by Exposure:PREEXISTING EYE, SKIN, RESPIRATORY
DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

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

First Aid:EYE-FLUSH EYES WITH PLENTY OF WATER FOR 15 MIN WHILE HOLDING
EYELIDS OPEN. GET MEDICAL ATTENTION. SKIN: REMOVE CONTAMINATED
CLOTHES/SHOES & WIPE EXCESS FROM SKIN. FLUSH SKIN WITH WATER.
FOLLOW BY WASH ING WITH SOAP & WATER. IF IRRITATION OCCURS, GET
MEDICAL ATTENTION. DO NOT REUSE CLOTHING UNTIL CLEANED.
INHALATION-REMOVE VICTIM TO FRES

H AIR & PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GIVE ARTIFICIAL RESPIRATION IF NOT BREATHING. GET MEDICAL ATTENTION. INGESTION-DO NOT INDUCE VOMITING. IF VOMITING OCCURS SPONTANEOUSLY, KEEP HEAD BELOW HIPS TO PREVENT ASPIRATION OF LIQUID INTO THE LUNGS. GET MEDICAL ATTENTION.

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

Flash Point Method:TCC

Flash Point:=61.1C, 142.F

Lower Limits:1

Upper Limits:6

Extinguishing Media:WATER FOG, FOAM, DRY CHEMICAL, CARBON DIOXIDE. DO

NOT USE DIRECT STREAM OF WATER. PRODUCT WILL FLOAT & MAY REIGNITE ON SURFACE OF WATER.

Fire Fighting Procedures:DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES & RUBBER BOOTS) INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

Unusual Fire/Explosion Hazard:COOL FIRE EXPOSED CONTAINERS WITH WATER TO PREVENT VAPOR PRESSURE BUILDUP

WHICH COULD RESULT IN CONTAINER

RUPTURE. CONTAINER AREAS EXPOSED TO DIRECT FLAME CONTACT SHOULD BE COOLED WITH LARGE QUANTITIES OF WATER AS NEEDED TO PREVENT WEAKENING OF CONTAINER STRUCTURE.

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

Spill Release Procedures:LARGE SPILL-ELIMINATE ALL IGNITION SOURCES.

WEAR APPROPRIATE RESPIRATOR & PROTECTIVE CLOTHING. SHUT OFF SOURCE OF LEAK IF SAFE. DIKE & CONTAIN. REMOVE WITH VACUUM TRUCK OR PUMP TO STORAGE

/SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ABSORBENT

MATERIAL. PLACE IN NON-LEAKING CONTAINERS & SEAL FOR DISPOSAL.

FLUSH AREA WITH WATER TO REMOVE TRACES. SMALL SPILL:TAKE UP WITH ABSORBENT MATERIAL

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

Handling and Storage Precautions:KEEP LIQUID & VAPOR AWAY FROM HEAT,

SPARKS & FLAME. SURFACES THAT ARE SUFFICIENTLY HOT MAY IGNITE

LIQUID EVEN IN THE ABSENCE OF SPARKS OR FLAME. USE WITH ADEQUATE VENTILATION

N. EXTINGUISH PILOT LIGHTS, CIGARETTES & TURN OFF ALL IGNITION SOURCES PRIOR TO USE & UNTIL VAPORS ARE GONE.
Other Precautions:VAPORS MAY ACCUMULATE & TRAVEL TO IGNITION SOURCES DISTANT FROM THE HANDLING SITE. FLASH FIRE MAY RESULT. KEEP CLOSED WHEN NOT IN USE. EMPTY CONTAINERS MAY CONTAIN EXLOSIVE VAPORS.

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

Respiratory Protection:AVOID PROLONGED OR REPEATED BREATHING OF VAPORS. USE A NIOSH-APPROVED RESPIRATOR AS REQUIRED TO PREVENT OVEREXPOSURE. I/A/W 29CFR1910.154, USE EITHER AN ATMOSHPERE-SUPPLYING RESPIRATOR OR AN AIR-PURIF YING RESPIRATOR FOR ORGANIC VAPOR.

Ventilation:USE EXPLOSION PROOF VENTILATION AS REQUIRED TO CONTROL VAPOR CONCENTRATIONS.

Protective Gloves:WEAR CHEMICAL RESISTANT GLOVES

Eye Protection:SAFETY GLASSES OR GOGGLES AS APPROPRIATE.

Other Protective Equipment:CHEMICAL RESISTANT CLOTHING AS NECESSARY TO MINIMIZE SKIN CONTACT.

Work Hygienic Practices:WASH W/SOAP &

WATER BEFORE EATING, DRINKIN,

ETC. AIR DRY CONTAMINATED CLOTHING THEN LAUNDER BEFORE REUSE.

Supplemental Safety and Health

CHRONIC EXPOSURE TO VAPORS OF A MIXTURE CONTAINING 50% PSEUDOCUMENE (AND POSSIBLY CONTAMINATED WITH BENZENE) CAUSED DECREASED WEIGHT GAIN AND BLOOD CHANGES (LYMPHOPENIA AND NEUTROPHILIA). LIVER, LUNG, SPLEEN, KIDNEY, AND BONE MARROW EFFECTS IN RATS. PSEUDOCUMENE AND NAPHTHALENE WERE NOT MUTAGENIC IN THE AMES TEST.

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===== Physical/Chemical P
roperties =====

HCC:V4

NRC/State Lic Num:NONE

Boiling Pt:B.P. Text:355-420 F

Melt/Freeze Pt:M.P/F.P Text:NOT AVAILABLE

Decomp Temp:Decomp Text:NOT PROVIDED

Vapor Pres:5.2 AT 100 F

Vapor Density:4.8

Volatile Org Content %:100

Spec Gravity:0.9 AT 60 F

Evaporation Rate & Reference:0.07 (N-BUTYL ACETATE=1)

Solubility in Water:NEGLIGIBLE

Appearance and Odor:COLORLESS LIQUID, AROMATIC HYDROCARBON ODOR

Percent Volatiles by Volume:100

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===== Stability and Reactivity Data

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Stability Indicator/Materials to Avoid: YES
AVOID CONTACT WITH STRONG OXIDIZING AGENTS.
Stability Condition to Avoid: AVOID HEAT, FLAME
Hazardous Decomposition Products: CARBON MONOXIDE AND UNIDENTIFIED
ORGANIC COMPOUNDS MAY BE FORMED DURING COMBUSTION

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Toxicological Information
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Toxicological Information: SHELL CYCLO SOL(R) 150 AROMATIC SOLVENT:
ACUTE ORAL LD50=13.3 ML/KG (RAT), ACUTE DERMAL LD50>5 ML/KG
(RABBIT), ACUTE INHALATION LC50>580 PPM/4H (RAT).

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Disposal Considerations
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Waste Disposal Methods: UNDER EPA-CWA, PRODUCT IS CONSIDERED AN OIL
UNDER 311. SPILLS INTO OR LEADING TO SURFACE WATERS THAT CAUSE A
SHEEN MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER,
800-424-8802. MATERIAL IS IGNITABLE HAZARDOUS WASTE UNDER
EPA-RCRA. REFER TO LATEST EPA OR STATE REGS REGARDING PROPER
DISPOSAL.

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MSDS Transport Information
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Transport Information: DEPARTMENT OF TRANSPORTATION CLASSIFICATION:
COMBUSTIBLE LIQUID, III. D.O.T PROPER SHIPPING NAME: PETROLEUM
DISTILLATES, N.O.S. (PETROLEUM NAPHTHA). OTHER REQUIREMENTS: UN1268,
GUIDE 27. THIS PRODUCT CONTAINS TRIMETHYLBENZENES (17%) WHICH ARE
MARINE POLLUTANTS UNDER 29 CFR 172.101, APPENDIX B. NOT REGULATED
BY D.O.T. IF IN A CONTAINER OF 119 GALLON CAPACITY OR LESS.

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Regulatory Information
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SARA Title

III Information: IN ACCORDANCE WITH SARA TITLE III, SECTION
313, THE ENVIRONMENTAL DATA SHEET (EDS) SHOULD ALWAYS BE COPIED AND
SENT WITH THE MSDS.

Federal Regulatory Information: THIS PRODUCT IS LISTED ON THE EPA/TSCA
INVENTORY OF CHEMICAL SUBSTANCES. PER 40 CFR PART 82, THIS PRODUCT
DOES NOT CONTAIN NOR WAS IT DIRECTLY MANUFACTURED WITH ANY CLASS I
OR CLASS II OZONE DEPLETING SUBSTANCES.

State Regulatory Information: THE FOLLOWING CHEMICALS ARE SPECIFICALLY
LISTED BY IND

INDIVIDUAL STATES: TRIMETHYLBENZENE, 1,2,4- (CAS
95-63-6) CA, MA, MN, NJ, PA. NAPHTHALENE (CAS 91-20-3; CA, CT,
FL, IL, LA, MA, ME, MN, NJ, PA, RI.

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

Disclaimer (provided with this information by the compiling agencies):
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