

TELLUS(R) T OIL 46  
65402

05/13/93

SHELL MATERIAL SAFETY DATA SHEET

BE SAFE. READ OUR PRODUCT SAFETY INFORMATION ... AND PASS IT ON.

PRODUCT LIABILITY LAW REQUIRES IT!

\*\*\*\*\* MATERIAL SAFETY DATA SHEET 60533 - 06 \*\*\*\*\*

TELLUS(R) T OIL 46

SH MSDS: 60533 - 06

05/13/93

MANUFACTURER'S NAME AND ADDRESS

SHELL OIL COMPANY  
PRODUCT SAFETY & COMPLIANCE  
P.O. BOX 4320  
HOUSTON, TX 77210

TELEPHONE NUMBERS:

24 HOUR EMERGENCY ASSISTANCE  
SHELL: 713-473-9461 CHEMTREC: 800-424-9300

GENERAL MSDS ASSISTANCE

SHELL: 713-241-4819

SECTION I	NAME
PRODUCT:	TELLUS(R) T OIL 46
CHEM NAME:	MIXTURE (SEE SECTION II-A) ACUTE HEALTH HAZARD: 1
CHEM FAMILY:	PETROLEUM HYDROCARBON; HYDRAULIC OIL FIRE HAZARD: 1
SHELL CODE:	65402 REACTIVITY: 0

SECTION II-A	PRODUCT/INGREDIENT		
NO.	COMPOSITION	CAS	PERCENT
P	TELLUS T OIL 46		
1	HYDROTREATED HEAVY PARAFFINIC DISTILLATE	64742-54-7	70-80
2	HYDROTREATED LIGHT NAPHTHENIC DISTILLATE	64742-53-6	10-15
3	SOLVENT REFINED, HYDROTREATED MIDDLE DISTILLATE	64742-46-7	5-10
4	ADDITIVE PACKAGE	MIXTURE	<5

NFPA HAZARD RATING: HEALTH 0 FIRE 1 REACTIVITY 0

SECTION II-B	ACUTE TOXICITY DATA		
NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
P	NOT AVAILABLE		

SECTION III	HEALTH INFORMATION
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THE HEALTH EFFECTS NOTED BELOW ARE CONSISTENT WITH REQUIREMENTS UNDER THE OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200).

EYE CONTACT:

BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE EYES.

SKIN CONTACT:

BASED ON COMPONENT INFORMATION, PRODUCT IS PRESUMED TO BE PRACTICALLY NON-IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT MAY RESULT IN SKIN DISORDERS SUCH AS DERMATITIS. OIL ACNE OR FOLLICULITIS. ACCIDENTAL RELEASE UNDER HIGH PRESSURE APPLICATIONS MAY RESULT IN INJECTION OF OIL INTO THE SKIN CAUSING LOCAL NECROSIS.

INHALATION:

THE INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST MAY CAUSE A MILD IRRITATION OF THE MUCOUS MEMBRANES OF THE UPPER RESPIRATORY TRACT.

INGESTION:

BASED ON COMPONENT INFORMATION, PRODUCT IS NO MORE THAN SLIGHTLY TOXIC IF SWALLOWED.

SIGNS AND SYMPTOMS:

IRRITATION AS NOTED ABOVE. LOCAL NECROSIS MAY BE EVIDENCED BY DELAYED ONSET OF PAIN AND TISSUE DAMAGE A FEW HOURS FOLLOWING HIGH PRESSURE INJECTION.

AGGRAVATED MEDICAL CONDITIONS:

PREEXISTING SKIN AND RESPIRATORY DISORDERS MAY BE AGGRAVATED BY EXPOSURE TO THIS PRODUCT.

OTHER HEALTH EFFECTS:

THIS PRODUCT AND ITS COMPONENTS ARE NOT CLASSIFIED AS CARCINOGENS BY INTERNATIONAL AGENCY FOR RESEARCH ON CANCER (IARC), NATIONAL TOXICOLOGY PROGRAM (NTP) OR OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA).

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SECTION IV | OCCUPATIONAL EXPOSURE LIMITS  
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NO.	OSHA		ACGIH		OTHER
	PEL/TWA	PEL/CEILING	TLV/TWA	TLV/STEL	
P	*5 MG/M3	NONE	*5 MG/M3	*10 MG/M3	NONE

\*OIL MIST, MINERAL  
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SECTION V | EMERGENCY AND FIRST AID PROCEDURES

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EYE CONTACT: FLUSH EYES WITH WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING/SHOES WIPE EXCESS FROM SKIN. FLUSH SKIN WITH WATER. FOLLOW BY WASHING WITH SOAP AND WATER. IF IRRITATION OCCURS, GET MEDICAL ATTENTION. IF MATERIAL IS INJECTED UNDER THE SKIN, GET MEDICAL ATTENTION PROMPTLY TO PREVENT SERIOUS DAMAGE; DO NOT WAIT FOR SYMPTOMS TO DEVELOP.

INHALATION: REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS DIFFICULT. GET MEDICAL ATTENTION.

INGESTION: DO NOT INDUCE VOMITING. IN GENERAL, NO TREATMENT IS NECESSARY UNLESS LARGE QUANTITIES OF PRODUCT ARE INGESTED. HOWEVER, GET MEDICAL ADVICE.

NOTE TO PHYSICIAN: IN GENERAL, EMESIS INDUCTION IS UNNECESSARY IN HIGH VISCOSITY, LOW VOLATILITY PRODUCTS, I.E., MOST OILS AND GREASES.

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SECTION VI | SUPPLEMENTAL HEALTH INFORMATION

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AMOCO HAS REPORTED TO THE U.S. EPA PURSUANT TO SECTION 8(E) OF TSCA THAT A SAMPLE OF HYDROTREATED MIDDLE DISTILLATE (CAS REGISTRY NUMBER 64742-46-7) APPLIED REPEATEDLY TO THE SKIN OF EXPERIMENTAL ANIMALS OVER THEIR LIFETIME PRODUCED A WEAK TUMORIGENIC RESPONSE IN THE SKIN. THE FULL REFINING/PROCESS HISTORY OF THIS SAMPLE WAS NOT PROVIDED IN AMOCO'S SUBMISSION.

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SECTION VII | PHYSICAL DATA

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BOILING POINT (DEG F): NOT AVAILABLE	SPECIFIC GRAVITY (H2O=1): 0.8816	VAPOR PRESSURE (MM HG): <0.1
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MELTING POINT (DEG F): -30 (POUR POINT)	SOLUBILITY (IN WATER): NEGLEGIBLE	VAPOR DENSITY (AIR=1): NOT AVAILABLE
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VISCOSITY: 44

(CS @ 104 DEG F)

EVAPORATION RATE (NORMAL BUTYL ACETATE = 1): NOT AVAILABLE

APPEARANCE AND ODOR: AMBER OIL. SLIGHT HYDROCARBON ODOR.

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SECTION VIII | FIRE AND EXPLOSION HAZARDS

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FLASH POINT AND METHOD: 320 DEG F. (PMCC)  
FLAMMABLE LIMITS/% VOLUME IN AIR:  
LOWER: N/AV UPPER: N/AV

EXTINGUISHING MEDIA:

USE WATER FOG, FOAM, DRY CHEMICAL OR CO2. DO NOT USE A DIRECT STREAM OF WATER. PRODUCT WILL FLOAT AND CAN BE REIGNITED ON SURFACE OF WATER.

SPECIAL FIRE FIGHTING PROCEDURES AND PRECAUTIONS:

MATERIALS WILL NOT BURN UNLESS PREHEATED. DO NOT ENTER CONFINED FIRE SPACE WITHOUT FULL BUNKER GEAR (HELMET WITH FACE SHIELD, BUNKER COATS, GLOVES AND RUBBER BOOTS), INCLUDING A POSITIVE PRESSURE NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE EXPOSED CONTAINERS WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

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SECTION IX | REACTIVITY

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STABILITY: STABLE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID:

AVOID HEAT, OPEN FLAMES, AND OXIDIZING MATERIALS.

HAZARDOUS DECOMPOSITION PRODUCTS:

THERMAL DECOMPOSITION PRODUCTS ARE HIGHLY DEPENDENT ON THE COMBUSTION CONDITIONS. A COMPLEX MIXTURE OF AIRBORNE SOLID, LIQUID, PARTICULATES AND GASES WILL EVOLVE WHEN THIS MATERIAL UNDERGOES PYROLYSIS OR COMBUSTION. CARBON MONOXIDE AND OTHER UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED UPON COMBUSTION.

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SECTION X | EMPLOYEE PROTECTION

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RESPIRATORY PROTECTION:

IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS (SEC. IV) USE A NIOSH-APPROVED RESPIRATOR TO PREVENT OVEREXPOSURE. IN ACCORD WITH 29 CFR 1910.134 USE EITHER AN ATMOSPHERE-SUPPLYING RESPIRATOR OR AN AIR-PURIFYING RESPIRATOR FOR ORGANIC VAPORS AND PARTICULATES.

## PROTECTIVE CLOTHING:

WEAR CHEMICAL RESISTANT GLOVES AND OTHER PROTECTIVE CLOTHING AS REQUIRED TO MINIMIZE SKIN CONTACT. NO SPECIAL EYE PROTECTION IS ROUTINELY NECESSARY. TEST DATA FROM PUBLISHED LITERATURE AND/OR GLOVE AND CLOTHING MANUFACTURERS INDICATE THE BEST PROTECTION IS PROVIDED BY NITRILE GLOVES.

## ADDITIONAL PROTECTIVE MEASURES:

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SECTION XI | ENVIRONMENTAL PROTECTION  
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## SPILL OR LEAK PROCEDURES:

MAY BURN ALTHOUGH NOT READILY IGNITABLE. USE CAUTIOUS JUDGMENT WHEN CLEANING UP LARGE SPILLS. \*\*\* LARGE SPILLS \*\*\* WEAR RESPIRATOR AND PROTECTIVE CLOTHING AS APPROPRIATE. SHUT OFF SOURCE OF LEAK IF SAFE TO DO SO. DIKE AND CONTAIN. REMOVE WITH VACUUM TRUCKS OR PUMP TO STORAGE/SALVAGE VESSELS. SOAK UP RESIDUE WITH AN ABSORBENT SUCH AS CLAY, SAND OR OTHER SUITABLE MATERIAL; DISPOSE OF PROPERLY. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE. \*\*\* SMALL SPILLS \*\*\* TAKE UP WITH AN ABSORBENT MATERIAL AND DISPOSE OF PROPERLY.

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SECTION XII | SPECIAL PRECAUTIONS  
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MINIMIZE SKIN CONTACT. WASH WITH SOAP AND WATER BEFORE EATING, DRINKING, SMOKING OR USING TOILET FACILITIES. LAUNDRY CONTAMINATED CLOTHING BEFORE REUSE. PROPERLY DISPOSE OF CONTAMINATED LEATHER ARTICLES, INCLUDING SHOES, THAT CANNOT BE DECONTAMINATED. STORE IN A COOL, DRY PLACE WITH ADEQUATE VENTILATION. KEEP AWAY FROM OPEN FLAMES AND HIGH TEMPERATURES.

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SECTION XIII | TRANSPORTATION REQUIREMENTS  
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DEPARTMENT OF TRANSPORTATION CLASSIFICATION:  
NOT HAZARDOUS BY D.O.T. REGULATIONS

D.O.T. PROPER SHIPPING NAME:

OTHER REQUIREMENTS:

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SECTION XIV | OTHER REGULATORY CONTROLS  
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THE COMPONENTS OF THIS PRODUCT ARE LISTED ON THE EPA/TSCA INVENTORY OF CHEMICAL SUBSTANCES.

PROTECTION OF STRATOSPHERIC OZONE (PURSUANT TO SECTION 611 OF THE CLEAN AIR ACT

AMENDMENTS OF 1990): 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.

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

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SECTION XV | STATE REGULATORY INFORMATION

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THE FOLLOWING CHEMICALS ARE SPECIFICALLY LISTED BY INDIVIDUAL STATES; OTHER PRODUCT SPECIFIC HEALTH AND SAFETY DATA IN OTHER SECTIONS OF THE MSDS MAY ALSO BE APPLICABLE FOR STATE REQUIREMENTS. FOR DETAILS ON YOUR REGULATORY REQUIREMENTS YOU SHOULD CONTACT THE APPROPRIATE AGENCY IN YOUR STATE.

STATE LISTED COMPONENT	CAS NUMBER	PERCENT	STATE CODE
HYDROTREATED LIGHT NAPHTHENIC DISTILLATE	64742-53-6	10-15	MA

CA = CALIFORNIA HAZ. SUBST. LIST; CA65C, CA65R, CA65C/R = CALIFORNIA SAFE DRINKING WATER AND TOXICS ENFORCEMENT ACT OF 1986 OR PROPOSITION 65 LIST; CT = CONNECTICUT TOXIC. SUBST. LIST; FL = FLORIDA SUBST. LIST; IL = ILLINOIS TOX. SUBST. LIST; LA = LOUISIANA HAZ. SUBST. LIST; MA = MASSACHUSETTS SUBST. LIST; ME = MAINE HAZ. SUBST. LIST; MN = MINNESOTA HAZ. SUBST. LIST; NJ = NEW JERSEY HAZ. SUBST. LIST; PA = PENNSYLVANIA HAZ. SUBST. LIST; RI = RHODE ISLAND HAZ. SUBST. LIST.

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SECTION XVI | SPECIAL NOTES

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REVISIONS WERE MADE IN SECTIONS II-A (% INGREDIENTS), XV AND EDS (% INGREDIENTS).

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, SHELL MAKES NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. SHELL ASSUMES NO RESPONSIBILITY FOR INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN.

WE ARE PROVIDING OUR MOST RECENT MATERIAL SAFETY DATA SHEET AND/OR ENVIRONMENTAL DATA SHEET. IF YOU WISH TO RECEIVE UPDATES TO THIS INFORMATION, PLEASE CALL SHELL'S GENERAL MSDS ASSISTANCE LINE (713-241-4819) TO ENSURE THAT YOU ARE ADDED TO SHELL'S REGULAR MSDS DISTRIBUTION SYSTEM.

BE SAFE. READ OUR PRODUCT SAFETY INFORMATION...AND PASS IT ON. (PRODUCT LIABILITY LAW REQUIRES IT)

SHELL OIL COMPANY  
PRODUCT SAFETY AND COMPLIANCE  
P. O. BOX 4320  
HOUSTON, TX. 77210

\*\*\*\*\* ENVIRONMENTAL DATA SHEET 60533 - 03 \*\*\*\*\*

EDS: 60533 - 03 05/13/93

PRODUCT NAME: TELLUS(R) T OIL 46  
 PRODUCT CODE: 65402

MANUFACTURER'S NAME AND ADDRESS

SHELL OIL COMPANY  
 P.O. BOX 4320  
 HOUSTON, TX 77210

TELEPHONE NUMBERS:

24 HOUR EMERGENCY ASSISTANCE  
 SHELL: 713-473-9461 CHEMTREC: 800-424-9300

FOR ADDITIONAL INFORMATION ON THIS ENVIRONMENTAL DATA PLEASE  
 CALL 713-241-2252

SECTION I | PRODUCT COMPOSITION

NO.	COMPOSITION	CAS	PERCENT
P	TELLUS T OIL 46	MIXTURE	100
1	HYDROTREATED HEAVY PARAFFINIC DISTILLATE	64742-54-7	70-80
2	HYDROTREATED LIGHT NAPHTHENIC DISTILLATE	64742-53-6	10-15
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4	ADDITIVE PACKAGE	MIXTURE	<5

SECTION II | SARA TITLE III INFORMATION

NO.	EHS RQ*	EHS TPQ*	SEC-313	313 CATEGORY	311/312 CATEGORY
	(*1)	(*2)	(*3)	(*4)	(*5)

BASED ON THE DATA AVAILABLE TO SHELL THIS PRODUCT CONTAINS NO HAZARDOUS SUBSTANCES AS DEFINED BY SARA TITLE III, SECTION 311(E).

- \*1 = REPORTABLE QUANTITY OF EXTREMELY HAZARDOUS SUBSTANCE, SEC 302  
 \*2 = THRESHOLD PLANNING QUANTITY, EXTREMELY HAZARDOUS SUBSTANCE, SEC 302  
 \*3 = TOXIC CHEMICAL, SEC 313  
 \*4 = CATEGORY AS REQUIRED BY SEC 313 (40 CFR 372.42), MUST BE USED ON TOXIC RELEASE INVENTORY FORM  
 \*5 = HAZARD CATEGORY FOR SARA SEC. 311/312 REPORTING

HEALTH: H-1 = IMMEDIATE (ACUTE) HEALTH HAZARD  
 H-2 = DELAYED (CHRONIC) HEALTH HAZARD  
 PHYSICAL: P-3 = FIRE HAZARD  
 P-4 = SUDDEN RELEASE OF PRESSURE HAZARD  
 P-5 = REACTIVE HAZARD

SECTION III | ENVIRONMENTAL RELEASE INFORMATION

THIS PRODUCT IS COVERED BY EPA'S COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA) PETROLEUM EXCLUSION. THEREFORE RELEASES TO AIR, LAND, OR WATER ARE NOT REPORTABLE UNDER CERCLA ("SUPERFUND"). HOWEVER UNDER SECTION 311 OF EPA'S CLEAN WATER ACT (CWA), THIS PRODUCT IS CONSIDERED AN OIL. AS SUCH, SPILLS INTO OR LEADING TO SURFACE WATERS THAT CAUSE A SHEEN MUST BE REPORTED TO THE NATIONAL RESPONSE CENTER, 800-424-8802.

THIS PRODUCT IS AN OIL UNDER 49 CFR (DOT) PART 130. IF SHIPPED BY RAIL OR HIGHWAY IN A TANK WITH A CAPACITY OF 3,500 GALLONS OR MORE, IT IS SUBJECT TO THE REQUIREMENTS OF PART 130. MIXTURE SOLUTIONS IN WHICH THIS PRODUCT IS PRESENT AT 10% OR MORE MAY ALSO BE SUBJECT TO THIS RULE.

SECTION IV | RCRA INFORMATION

IF THIS PRODUCT BECOMES A WASTE, IT WOULD NOT BE A HAZARDOUS WASTE BY RCRA CRITERIA (40 CFR 261). PLACE IN AN APPROPRIATE DISPOSAL FACILITY IN COMPLIANCE WITH LOCAL REGULATIONS.

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 (713) 241-2252

FOR EMERGENCY ASSISTANCE PLEASE CALL  
 SHELL: (713) 473-9461  
 CHEMTREC: (800) 424-9300

\*\*\*\*\*  
 THIS MSDS HAS BEEN PROVIDED IN AN ELECTRONIC FORMAT FOR USE IN THE CHEMTREC EMERGENCY RESPONSE PROGRAM AND/OR OTHER APPROVED PROGRAMS. THIS FORMAT MAY CONTAIN BLANKS WHERE INFORMATION WAS NOT AVAILABLE OR NOT APPLICABLE AND THEREFORE MAY NOT BE FULLY COMPLIANT WITH THE OSHA HAZARD COMMUNICATION

STANDARD. IF YOU PURCHASE OR USE THIS SHELL PRODUCT AND HAVE NOT RECEIVED  
A MSDS FROM SHELL PLEASE CONTACT US AND WE WILL PROVIDE ONE. THIS WILL ENSURE  
THAT YOU RECEIVE UPDATES OF THIS INFORMATION.

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