

MATERIAL SAFETY DATA SHEETS MSDS

EQUILON MATERIAL SAFETY DATA SHEET

NOTE: Read and understand Material Safety Data Sheet before handling or disposing of product

SHELL RETINAX LC GREASE

EQ MSDS: 856302 - 01

01/04/99

NAME AND ADDRESS

EQUILON ENTERPRISES LLC
PRODUCT STEWARDSHIP
P.O. BOX 674414
HOUSTON, TX 77267-4414

TELEPHONE NUMBERS:

24 HOUR EMERGENCY ASSISTANCE
EQUIVA SERVICES: 877-276-7283

CHEMTREC: 800-424-9300

GENERAL MSDS ASSISTANCE
EQUIVA SERVICES: 877-276-7285

SECTION I**NAME**

PRODUCT:	SHELL RETINAX LC GREASE	
CHEM NAME:	MIXTURE (SEE SECTION II-A)	HEALTH HAZARD: 1
CHEM FAMILY:	PETROLEUM HYDROCARBON; INDUSTRIAL LUBRICATING GREASE	FIRE HAZARD: 1
SHELL CODE:	70428	REACTIVITY: 0

SECTION II-A**PRODUCT/INGREDIENT**

NO.	COMPOSITION	CAS NO.	PERCENT
---	-----	-----	-----
P	SHELL RETINAX LC GREASE	MIXTURE	100
1	HYDROTREATED HEAVY NAPHTHENIC DISTILLATE	64742-52-5	50-60
2	SOLVENT REFINED HYDROTREATED RESIDUAL OIL	64742-57-0	20-30
3	LITHIUM HYDROXYSTEARATE	7620-77-1	5-10
4	DILITHIUM AZELATE	38900-29-7	2-5
5	ADDITIVES, PROPRIETARY	MIXTURE	5-10

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

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

EYE CONTACT: MAY BE MILDLY IRRITATING TO THE EYES.

SKIN CONTACT: PROLONGED OR REPEATED CONTACT MAY CAUSE VARIOUS SKIN DISORDERS SUCH AS DERMATITIS, FOLLICULITIS OR OIL ACNE. RELEASE DURING HIGH PRESSURE USAGE MAY RESULT IN INJECTION OF OIL INTO THE SKIN CAUSING LOCAL NECROSIS.

INHALATION: NOT EXPECTED TO BE A RELEVANT ROUTE OF EXPOSURE; HOWEVER, UNDER HIGH TEMPERATURE CONDITIONS, VAPORS IRRITATING TO THE NOSE, THROAT AND UPPER RESPIRATORY TRACT MAY BE PRODUCED.

INGESTION: NO SPECIFIC INFORMATION IDENTIFIED.

SIGNS AND SYMPTOMS: IRRITATION AS NOTED ABOVE. LOCAL NECROSIS IS EVIDENCED BY DELAYED ONSET OF PAIN AND TISSUE DAMAGE A FEW HOURS FOLLOWING INJECTION.

AGGRAVATED MEDICAL CONDITIONS:
 PREEXISTING SKIN 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).

SECTION IV OCCUPATIONAL EXPOSURE LIMITS

COMP NO.	OSHA PEL/TWA	OSHA PEL/CEILING	TLV/TWA	ACGIH TLV/STEL	OTHER
---	-----	-----	-----	-----	-----

NO OSHA/PEL OR ACGIH/TLV HAS BEEN ESTABLISHED.

SECTION V EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT: FLUSH WITH WATER FOR 15 MINUTES WHILE HOLDING EYELIDS OPEN. GET MEDICAL ATTENTION.

SKIN CONTACT: REMOVE CONTAMINATED CLOTHING AND WIPE EXCESS OFF. WASH WITH SOAP AND WATER OR A WATERLESS HAND CLEANER FOLLOWED BY SOAP AND WATER. DO NOT REUSE CLOTHING UNTIL THOROUGHLY CLEANED. IF IRRITATION PERSISTS, 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: *NOTE TO THE PHYSICIAN: IN GENERAL, EMESIS INDUCTION IS UNNECESSARY IN HIGH VISCOSITY, LOW VOLATILITY PRODUCTS, I.E., MOST OILS AND GREASES.

SECTION VI**SUPPLEMENTAL HEALTH INFORMATION**

NONE IDENTIFIED.

SECTION VII**PHYSICAL DATA**

BOILING POINT (DEG F): SPECIFIC GRAVITY (H₂O = 1): VAPOR PRESSURE (MM HG):
NOT AVAILABLE NOT AVAILABLE NOT AVAILABLE

MELTING POINT (DEG F): SOLUBILITY IN WATER: VAPOR DENSITY (AIR = 1):
329 (DROPPING NEGLIGIBLE NOT AVAILABLE
POINT)

VISCOSITY: 15-18
(CS @ 212 F)

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

APPEARANCE AND ODOR: RED, SMOOTH/TACKY; SLIGHT ODOR.
PHYS/CHEM PROPERTIES:

SECTION VIII**FIRE AND EXPLOSION HAZARDS**

FLASH POINT AND METHOD: 385 DEG F. PMCC (BASE OIL)
FLAMMABLE LIMITS/PERCENT VOLUME IN AIR: LOWER: N/AV HIGHER: N/AV

EXTINGUISHING MEDIA:

USE WATER FOG, 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:

DO NOT ENTER CONFINED FIRE SPACE WITHOUT PROPER PROTECTIVE EQUIPMENT
INCLUDING A NIOSH APPROVED SELF-CONTAINED BREATHING APPARATUS. COOL FIRE
EXPOSED CONTAINERS SURROUNDING EQUIPMENT AND STRUCTURES WITH WATER.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

SECTION IX REACTIVITY

STABILITY: STABLE HAZARDOUS POLYMERIZATION WILL NOT OCCUR

CONDITIONS AND MATERIALS TO AVOID:

AVOID HEAT, OPEN FLAME AND CONTACT WITH STRONG OXIDIZING AGENTS.

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 UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FORMED UPON
COMBUSTION.

SECTION X EMPLOYEE PROTECTION

RESPIRATORY PROTECTION:

NOT ORDINARILY REQUIRED.

PROTECTIVE CLOTHING

USE OIL RESISTANT GLOVES AND OTHER CLOTHING AS NEEDED TO MINIMIZE SKIN
CONTACT. AVOID CONTACT WITH EYES. WEAR SAFETY GLASSES OR GOGGLES AS
APPROPRIATE.

ADDITIONAL PROTECTIVE MEASURES:

SECTION XI ENVIRONMENTAL PROTECTION

SPILL OR LEAK PROCEDURES:

SCOOP UP EXCESS GREASE. CLEAN AREA WITH APPROPRIATE CLEANER.

SECTION XIISPECIAL PRECAUTIONS

STORE IN A COOL, DRY PLACE WITH ADEQUATE VENTILATION. KEEP AWAY FROM OPEN FLAMES AND HIGH TEMPERATURES.

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.

SECTION XIIITRANSPORTATION REQUIREMENTS

DEPARTMENT OF TRANSPORTATION CLASSIFICATION:
NOT HAZARDOUS BY D.O.T. REGULATIONS

DOT PROPER SHIPPING NAME:

OTHER REQUIREMENTS:

SECTION XIVOTHER REGULATORY CONTROLS

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 ENVIRONMENTAL DATA SHEET (EDS) SHOULD ALWAYS BE COPIED AND SENT WITH THE MSDS.

SECTION XVSTATE REGULATORY INFORMATION

STATE LISTED COMPONENT

CAS NO

PERCENT

STATE CODE

BASED ON INFORMATION AVAILABLE, THIS PRODUCT DOES NOT CONTAIN ANY CHEMICAL SUBSTANCE LISTED ON A CHEMICAL SPECIFIC STATE LIST.

SECTION XVI

SPECIAL NOTES

NEW PRODUCT. ORIGINAL MSDS ISSUE.

THE INFORMATION CONTAINED HEREIN IS BASED ON THE DATA AVAILABLE TO US AND IS BELIEVED TO BE CORRECT. HOWEVER, WE MAKE NO WARRANTY, EXPRESSED OR IMPLIED REGARDING THE ACCURACY OF THESE DATA OR THE RESULTS TO BE OBTAINED FROM THE USE THEREOF. WE ASSUME 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 OUR GENERAL MSDS ASSISTANCE LINE (877-276-7285) TO ENSURE THAT YOU ARE ADDED TO OUR REGULAR MSDS DISTRIBUTION SYSTEM.

PRODUCT NAME: SHELL RETINAX LC GREASE
PRODUCT CODE: 70428

EQ EDS: 856302 - 01

01/04/99

NAME AND ADDRESS

EQUILON ENTERPRISES LLC
P.O. BOX 674414
HOUSTON, TX 77267-4414

TELEPHONE NUMBERS:

24 HOUR EMERGENCY ASSISTANCE

EQUIVA SERVICES: 877-276-7283

CHEMTREC: 800-424-9300

FOR ADDITIONAL INFORMATION ON THIS ENVIRONMENTAL DATA PLEASE
CALL 877-276-7285

SECTION I

PRODUCT COMPOSITION

NO.	COMPOSITION	CAS	PERCENT
P	SHELL RETINAX LC GREASE	MIXTURE	100
1	HYDROTREATED HEAVY NAPHTHENIC DISTILLATE	64742-52-5	50-60
2	SOLVENT REFINED, HYDROTREATED RESIDUAL O IL	64742-54-7	20-30
3	LITHIUM HYDROXYSTEARATE	7620-77-1	5-10
4	DILITHIUM AZELATE	38900-29-7	2-5
5	ADDITIVES, PROPRIETARY	MIXTURE	5-10

SECTION II

SARA TITLE III INFORMATION

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

BASED ON THE DATA AVAILABLE THIS PRODUCT IS NOT REGULATED BY SARA,
TITLE III

-
- *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 372.65 C), MUST BE USED ON TOXIC
RELEASE INVENTORY FORM
 - *5 = CATEGORY (FOR AGGREGATE REPORTING REQUIREMENTS UNDER SARA 311, 312)
 - 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.

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

KAREN G. HAYNES

EQUIVA SERVICES LLC
P.O. BOX 674414
HOUSTON, TX 77267-4414

FOR ADDITIONAL INFORMATION ON THIS ENVIRONMENTAL DATA PLEASE CALL
(877) 276-7285

FOR EMERGENCY ASSISTANCE PLEASE CALL
EQUIVA SERVICES LLC: (877) 276-7283
CHEMTREC: (800) 424-9300

This document was generated by Equilon's Genesis Network Application.