



MATERIAL SAFETY DATA SHEET  
EQUILON MSDS: 61046E-02 06/10/99

MORLINA(R) OIL 320

TELEPHONE NUMBER:

24 HOUR EMERGENCY ASSISTANCE

EQUIVA SERVICES: 877-276-7283

CHEMTREC: 800-424-9300

GENERAL MSDS ASSISTANCE

877-276-7285

NAME AND ADDRESS

EQUILON ENTERPRISES LLC

PRODUCT STEWARDSHIP

P.O. BOX 674414

HOUSTON, TX 77267-4414

SECTION I NAME

PRODUCT: MORLINA(R) OIL 320

CHEM NAME: MIXTURE (SEE SECTION II-A)

CHEM FAMILY: PETROLEUM HYDROCARBON; CIRCULATING OIL

SHELL CODE: 65634

HEALTH HAZARD: 1 FIRE HAZARD: 1 REACTIVITY: 0

SECTION II-A PRODUCT/INGREDIENT

NO.	COMPOSITION	CAS NO.	PERCENT
P	MORLINA OIL 320		100
1	HYDROTREATED RESIDUAL OIL	64742-57-0	70-80
2	HYDROTREATED HEAVY PARAFFINIC DISTILLATE	64742-54-7	20-30
3	MINOR ADDITIVES	MIXTURE	<1

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	>5.0 G/KG, RAT*	>2.0 G/KG, RABBIT*	NOT AVAILABLE

\* BASED ON API STUDIES

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: BASED ON ESSENTIALLY SIMILAR PRODUCT TESTING, PRODUCT IS PRESUMED TO BE NON-IRRITATING TO THE EYES.

SKIN CONTACT: BASED ON ESSENTIALLY SIMILAR PRODUCT TESTING, PRODUCT IS PRESUMED TO BE 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 UPPER RESPIRATORY TRACT.

INGESTION: BASED ON ESSENTIALLY SIMILAR PRODUCT TESTING, PRODUCT IS PRESUMED TO BE NO MORE THAN SLIGHTLY TOXIC IF INGESTED.

SIGNS AND SYMPTOMS: IRRITATION AS NOTED ABOVE. 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). FOR A SPANISH TRANSLATION OF THIS MSDS, CALL 1-800-240-MSDS.

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SECTION IV OCCUPATIONAL EXPOSURE LIMITS

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COMP	OSHA			ACGIH	
NO.	PEL/TWA	PEL/CEILING	TLV/TWA	TLV/STEL	OTHER
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P	5 MG/M3*	NONE	5 MG/M3*	10 MG/M3*	

\*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 AND WIPE EXCESS OFF. WASH WITH SOAP AND WATER OR A WATERLESS HAND CLEANER FOLLOWED BY 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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NONE IDENTIFIED.

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SECTION VII PHYSICAL DATA

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BOILING POINT (DEG F):	SPECIFIC GRAVITY (H2O = 1):	VAPOR PRESSURE (MM HG):
NOT AVAILABLE	0.9042	<0.1
MELTING POINT (DEG F):	SOLUBILITY IN WATER:	VAPOR DENSITY (AIR = 1):
10 (POUR POINT)	NEGLECTIBLE	NOT AVAILABLE
		VISCOSITY: 304-336 (CS @ 104 DEG F)

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

APPEARANCE AND ODOR: YELLOW OIL. SLIGHT HYDROCARBON ODOR.

PHYS/CHEM PROPERTIES: SEE ABOVE FOR DETAILS

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SECTION VIII FIRE AND EXPLOSION HAZARDS

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FLASH POINT AND METHOD: 465 DEG F. (PMCC)

FLAMMABLE LIMITS/PERCENT VOLUME IN AIR: LOWER: N/AV HIGHER: 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:  
NONE IDENTIFIED

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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 PROLONGED 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:  
NONE IDENTIFIED

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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 PROLONGED 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  
DOT PROPER SHIPPING NAME: NOT APPLICABLE  
OTHER REQUIREMENTS: NOT APPLICABLE

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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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STATE LISTED COMPONENT	CAS NO	PERCENT	STATE CODE
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BASED ON INFORMATION AVAILABLE, THIS PRODUCT DOES NOT CONTAIN ANY CHEMICAL SUBSTANCE REGULATED BY A SPECIFIC STATE LIST.

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SECTION XVI SPECIAL NOTES

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CHANGE IN INGREDIENTS.

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THE INFORMATION CONTAINED IN THIS DATA SHEET IS BASED ON THE DATA AVAILABLE TO US AT THIS TIME, AND IS BELIEVED TO BE ACCURATE BASED UPON THAT DATA. IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT, FOR PURPOSE OF HAZARD COMMUNICATION. IT IS NOT INTENDED TO CONSTITUTE PRODUCT PERFORMANCE INFORMATION, AND NO EXPRESS OR IMPLIED WARRANTY OF ANY KIND IS MADE WITH RESPECT TO THE PRODUCT, UNDERLYING DATA OR THE INFORMATION CONTAINED HEREIN. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE, AND ARE ENCOURAGED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE THE APPLICABILITY OR EFFECT OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, YOU SHOULD CONSULT WITH YOUR LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. WE WILL NOT PROVIDE ADVICE ON SUCH MATTERS, OR BE RESPONSIBLE FOR ANY INJURY FROM THE USE OF THE PRODUCT DESCRIBED HEREIN. THE UNDERLYING DATA, AND THE INFORMATION PROVIDED HEREIN AS A RESULT OF THAT DATA, IS THE PROPERTY OF EQUIVA SERVICES, LLC AND IS NOT TO BE THE SUBJECT OF SALE OR EXCHANGE WITHOUT THE EXPRESS WRITTEN CONSENT OF EQUIVA SERVICES, LLC.

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MORLINA(R) OIL 320

TELEPHONE NUMBER:

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NAME AND ADDRESS

EQUILON ENTERPRISES

PRODUCT STEWARDSHIP

P.O. BOX 674414

HOUSTON, TX 77267-4414

PRODUCT CODE: 65634

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SECTION I PRODUCT COMPOSITION

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SECTION II SARA TITLE III INFORMATION

NO.	EHS RQ (*1)	EHS TPQ (*2)	SEC-313 (*3)	313 CATEGORY (*4)	311/312 CATEGORY (*5)
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BASED ON THE DATA AVAILABLE 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 372.65 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

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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.

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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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KAREN G. HAYNES

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 EQUIVA SERVICES LLC

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

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