

DONAX(R) TG FLUID
53010
08/26/98

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 60486 - 04

DONAX(R) TG FLUID
08/26/98

SH MSDS: 60486 - 04

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: DONAX(R) TG FLUID
CHEM NAME: MIXTURE (SEE SECTION II-A) HEALTH HAZARD: 1
CHEM FAMILY: PETROLEUM HYDROCARBON; TRANSMISSION FLUID FIRE HAZARD: 1
SHELL CODE: 53010 REACTIVITY: 0

SECTION II-A PRODUCT/INGREDIENT

NO.	COMPOSITION	CAS NO.	PERCENT
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P	DONAX TG FLUID	MIXTURE	100
1	HYDROTREATED, LIGHT NAPHTHENIC DISTILLATES	64742-55-8	35-50
2	SOLVENT DEWAXED, HEAVY PARAFFINIC DISTILLATES	64742-65-0	35-50

3	HYDROTREATED LIGHT NAPHTHENIC DISTILLATE	64742-53-6	1-3
4	POLYMETHACRYLATE	50867-55-5	1-3
5	BORONATED SUBSTITUTED SUCCINIMIDE		1-3

NFPA HAZARD RATING: HEALTH 1 FIRE 1 REACTIVITY 0

SECTION II-B

ACUTE TOXICITY DATA

NO.	ACUTE ORAL LD50	ACUTE DERMAL LD50	ACUTE INHALATION LC50
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1	>5.0 G/KG, RAT*	>2.0 G/KG, RABBIT*	NOT DETERMINED

IRRITATION INDEX, ESTIMATION OF IRRITATION (SPECIES)

SKIN:

(DRAIZE) BELIEVED TO BE > .50 - 3.00 /8.0 (RABBIT) SLIGHTLY IRRITATING

EYES:

(DRAIZE) BELIEVED TO BE < 15.00 /110 (RABBIT) NO APPRECIABLE EFFECT

SENSITIZATION:

NOT DETERMINED.

OTHER:

SOME LOW VISCOSITY NAPHTHENIC OILS HAVE CAUSED SKIN IRRITATION AND SKIN TUMORS IN LABORATORY ANIMALS WHEN REPEATEDLY APPLIED AND LEFT IN PLACE BETWEEN APPLICATIONS. THE SIGNIFICANCE OF THIS EFFECT TO HUMANS HAS NOT BEEN ESTABLISHED.

* 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 COMPONENT INFORMATION PRODUCT IS NO MORE THAN MINIMALLY IRRITATING TO THE EYES.

SKIN CONTACT: BASED ON COMPONENT INFORMATION PRODUCT IS NO MORE THAN MILDLY

IRRITATING TO THE SKIN. PROLONGED AND REPEATED CONTACT CAN RESULT IN VARIOUS SKIN DISORDERS SUCH AS DERMATITIS, FOLLICULITIS OR OIL ACNE.

INHALATION: INHALATION OF VAPORS (GENERATED AT HIGH TEMPERATURES ONLY) OR OIL MIST FROM THIS PRODUCT MAY CAUSE MINOR IRRITATION OF THE MUCOUS MEMBRANES OF THE UPPER RESPIRATORY TRACT.

INGESTION: BASED ON COMPONENT INFORMATION THIS PRODUCT IS NO MORE THAN SLIGHTLY TOXIC IF SWALLOWED.

SIGNS AND SYMPTOMS: IRRITATION AS NOTED ABOVE.

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

OTHER HEALTH EFFECTS:

SECTION IV

OCCUPATIONAL EXPOSURE LIMITS

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

*OIL MIST, MINERAL

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/SHOES AND WIPE EXCESS FROM SKIN.
FLUSH SKIN WITH WATER. FOLLOW BY WASHING WITH SOAP AND
WATER.

IF IRRITATION OCCURS, GET MEDICAL ATTENTION. DO NOT REUSE
CLOTHING UNTIL CLEANED.

INHALATION: REMOVE VICTIM TO FRESH AIR AND PROVIDE OXYGEN IF BREATHING IS
DIFFICULT. 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.*

NOTE TO PHYSICIAN: *IF MORE THAN 2.0 ML PER KG HAS BEEN INGESTED AND
VOMITING

HAS NOT OCCURRED, EMESIS SHOULD BE INDUCED WITH
SUPERVISION. KEEP VICTIM'S HEAD BELOW HIPS TO PREVENT
ASPIRATION. IF SYMPTOMS SUCH AS LOSS OF GAG REFLEX,
CONVULSIONS OR UNCONSCIOUSNESS OCCUR BEFORE EMESIS,

GASTRIC

LAVAGE USING A CUFFED ENDOTRACHEAL TUBE SHOULD BE
CONSIDERED.

SECTION VI

SUPPLEMENTAL HEALTH INFORMATION

NONE IDENTIFIED.

SECTION VII

PHYSICAL DATA

BOILING POINT (DEG F): SPECIFIC GRAVITY (H2O = 1): VAPOR PRESSURE (MM HG):
NOT DETERMINED 0.869 NOT DETERMINED

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

VOC: 38 G/L

VISCOSITY: >40
(CST @ 104 DEG

F)

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

APPEARANCE AND ODOR: RED LIQUID. SLIGHT HYDROCARBON ODOR.
PHYS/CHEM PROPERTIES:

SECTION VIII

FIRE AND EXPLOSION HAZARDS

FLASH POINT AND METHOD: >350 DEG F (COC)
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:

MATERIAL 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:

SECTION IX

REACTIVITY

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, CARBON DIOXIDE, SULFUR OXIDES, NITROGEN OXIDES, PHOSPHOROUS

OXIDES, AND OTHER UNIDENTIFIED ORGANIC COMPOUNDS MAY BE FOUND UPON COMBUSTION.

SECTION X

EMPLOYEE PROTECTION

RESPIRATORY PROTECTION:

IF EXPOSURE MAY OR DOES EXCEED OCCUPATIONAL EXPOSURE LIMITS (SECTION 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.

PROTECTIVE CLOTHING

WEAR CHEMICAL RESISTANT GLOVES AND OTHER PROTECTIVE CLOTHING AS REQUIRED TO

MINIMIZE SKIN CONTACT. WEAR SAFETY GOGGLES TO AVOID EYE CONTACT. TEST

DATA

FROM PUBLISHED LITERATURE AND/OR GLOVE AND CLOTHING MANUFACTURERS INDICATE

THE BEST PROTECTION IS PROVIDED BY NITRILE GLOVES.

ADDITIONAL PROTECTIVE MEASURES:

SECTION XI

ENVIRONMENTAL PROTECTION

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 MATERIALS; DISPOSE OF PROPERLY. FLUSH AREA WITH WATER TO REMOVE TRACE RESIDUE. *** SMALL SPILLS *** TAKE UP WITH AN ABSORBENT MATERIAL AND

DISPOSE

OF PROPERLY.

SECTION XII

SPECIAL PRECAUTIONS

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.

SECTION XIII

TRANSPORTATION REQUIREMENTS

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

DOT PROPER SHIPPING NAME:

OTHER REQUIREMENTS:

SECTION XIV

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

SECTION XV

STATE REGULATORY INFORMATION

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 NO	PERCENT	STATE CODE
HYDROTREATED LIGHT NAPHTHENIC DISTILLATE	64742-53-6	1-3	MA
PROPENOIC ACID, ETHYL ESTER	140-88-5	0.0075	MA, PA, RI , CA65C
HYDROGEN CHLORIDE	7647-01-0	0.02	MA, RI
PHOSPHORIC ACID	7664-38-2	0.02	RI

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
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.
CALIFORNIA PROPOSITION 65 FOOTNOTE: CA65C = THE CHEMICAL IDENTIFIED WITH
THIS CODE IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER. CA65R = THE
CHEMICAL IDENTIFIED WITH THIS CODE IS KNOWN TO THE STATE OF CALIFORNIA TO
CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM. CA65C/R = THE CHEMICAL
IDENTIFIED WITH THIS CODE IS KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BOTH
CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

A RISK ASSESSMENT PERFORMED ON THIS PRODUCT INDICATES THAT NO
CALIFORNIA PROP 65 WARNINGS ARE REQUIRED.

SECTION XVI

SPECIAL NOTES

THIS MSDS REVISION HAS CHANGES IN SECTION IIA - PRODUCT/INGREDIENT
INFORMATION
AND SECTION XV - STATE REGULATORY INFORMATION.

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.

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

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

* * * * * E N V I R O N M E N T A L D A T A S H E E T * * * * *
* *

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08/26/98
PRODUCT CODE: 53010

SH EDS: 60486 - 04

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HOUSTON, TX 77210

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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	DONAX TG FLUID	MIXTURE	100
1	HYDROTREATED LIGHT NAPHTHENIC DISTILLATES	64742-55-8	35-50
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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)
01	5000	500			

01 HYDROCHLORIC ACID (7647-01-1) - RANGE % 0.0047

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 372.65 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.

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COMPANY

77210

SHELL OIL

P.O. BOX 4320

HOUSTON, TX

FOR ADDITIONAL INFORMATION ON THIS ENVIRONMENTAL DATA PLEASE CALL
(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.

