MATERIAL SAFETY DATA SHEET (M S D S) 
For Oils, Greases and Related Lubricating Materials
Revised: 06/25/97

SECTION I - PRODUCT IDENTIFICATION

Manufacturer: CITGO PETROLEUM CORPORATION
P.O. BOX 26868
915 M.L. KING BLVD.
OKLAHOMA CITY OK 73126

Trade Name: MYSTIK JT-8 SUPER HEAVY DUTY MOTOR OIL SAE 15W-40
Product Class: MOTOR OIL

Product Code: 1300B-001
C.A.S. Number: COMPLEX MIXTURE

SECTION II - HAZARDOUS INGREDIENTS

Ingredients CAS # Weight Exposure Limits VP
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PETROLEUM HYDROCARBON 64742-54-7 50-75 5 mg/M3 5 mg/M30
STEL= 10 10

THIS PETROLEUM HYDROCARBON MAY ALSO CONTAIN THE FOLLOWING CAS
NUMBERED MATERIALS CAS# 64741-88-4 AND/OR CAS# 64741-89-5.
PETROLEUM HYDROCARBON 64742-65-0 5-20 5 mg/M3 5 mg/M30
STEL= 10 10

THIS PETROLEUM HYDROCARBON MAY ALSO BE REPRESENTED BY CAS# 64742
-54-7, 64741-88-4 OR 64741-89-5.

*PROPRIETARY ADD:5184  PROPRIETARY 5-20 5 mg/M3 5 mg/M3N/AP
STEL= 10 10

PROPRIETARY ADDITIVE 5184 CONTAINS 13.0% ORGANOMETALLIC ZINC
COMPOUND THAT MAY BE REPORTABLE UNDER SARA 313.

*PROPRIETARY ADD:5183  COMPLEX MIXTU 1-5 5 mg/M3 5 mg/M30
STEL= 10 10

PROPRIETARY ADDITIVE 5183 CONTAINS LESS THAN 6% ORGANOMETALLIC
ZINC COMPOUND THAT MAY BE REPORTABLE UNDER SARA 313 REGULATIONS.

150 POLYMER SOLUTION  PROPRIETARY 5-20 5 mg/M3 5 mg/M30
STEL= 10 10

*** ALL Ingredients in this product are listed in the T.S.C.A. Inventory.

SARA 311/312 CATEGORY - NONE.

SARA 313 - NOT APPLICABLE UNLESS OTHERWISE INDICATED BY AN
INGREDIENT IN SECTION II, HAZARDOUS INGREDIENTS, BY
MEANS OF AN ASTERISK NEXT TO THE AFFECTED INGREDIENTS
AND THE ASSOCIATED FOOTNOTE IN SECTION II STATING
"THESE ITEMS ARE LISTED ON THE SARA TITLE III SECTION
313 INVENTORY."

INGREDIENTS ARE PROPRIETARY. POTENTIAL HAZARDS HAVE BEEN
EVALUATED AND PERTINENT INFORMATION HAS BEEN INCLUDED
IN SECTIONS III-IX. EACH PROPRIETARY MATERIAL IS EITHER:
1. HELD A TRADE SECRET FROM CATO, 2. OSHA-NON-HAZARDOUS OR
BELOW 1% IF OSHA HAZARDOUS AND 3. BELOW 0.1% IF POTENTIALLY
CARCINOGENIC.

(cont.)
CITGO PETROLEUM CORPORATION
MYSK JT-8 SUPER HEAVY DUTY MOTOR OIL SAE 15W-40

SECTION II - HAZARDOUS INGREDIENTS (cont.)

-OTHER PRECAUTIONS: (cont.)
* -> These items are listed on the SARA TITLE III Section 313 inventory

SECTION III - PHYSICAL DATA

- Boiling Range: EST.>600°F Deg. F
- Evap. Rate: Slower than n-Butyl Acetate
- Volatiles volume: N/A %
- Appearance: AMBER LIQUID
- V.O.C.: N/A

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

- Flammability Class: 1
- Flash Point: 415°F(213°C)COC.LEL: N/AV

- EXTINGUISHING MEDIA:
  CARBON DIOXIDE, DRY CHEMICAL OR FOAM.

- SPECIAL FIREFIGHTING PROCEDURES:
  WATER STREAM MAY SPREAD FIRE, USE WATER SPRAY ONLY TO COOL CONTAINERS NOT ON FIRE.

- UNUSUAL FIRE & EXPLOSION HAZARDS:
  WILL FORM FLAMMABLE MIXTURES WITH AIR WHEN HEATED TO ABOUT THE FLASH POINT. WILL NOT FLASH SPONTANEOUSLY.

SECTION V - HEALTH HAZARD DATA

- PERMISSIBLE EXPOSURE LEVEL:
  TWA = 5 MG/M3; STEL = 10 MG/M3--AS OIL MIST--RESPIRATORY IRITANT. SEE SECTION II FOR CONCISE INFORMATION CONCERNING INGREDIENTS HAVING A PEL.
  THE PERMISSIBLE EXPOSURE LEVEL FOR PROPRIETARY ADDITIVE 5184 IS FOR OIL MIST.
  THE TLV/PEL LISTED FOR PROPRIETARY ADDITIVE 5183 IS FOR OIL MIST.

- EFFECTS OF OVEREXPOSURE:
  INHALATION: NOT EXPECTED TO BE ACUTELY TOXIC BY INHALATION. BREATHING PETROLEUM OIL MIST AT CONCENTRATIONS IN AIR THAT EXCEED THE RECOMMENDED EXPOSURE STANDARD CAN CAUSE RESPIRATORY IRRITATION OR DISCOMFORT. ANY PEL/TLV LISTED IN SECTION II OR V.1, IF ANY, MUST NOT BE EXCEEDED.

  SKIN: EXPECTED TO CAUSE NO MORE THAN MINOR SKIN IRRITATION WITH PROLONGED OR REPEATED CONTACT. CAUTION: USED MOTOR OILS HAVE CAUSED SKIN CANCER IN ANIMAL TESTS. AVOID PROLONGED OR REPEATED SKIN CONTACT WITH USED MOTOR OILS.

  EYES: EXPECTED TO CAUSE NO MORE THAN MINOR OR TEMPORARY EYE IRITATION, IF ANY, BASED ON DATA FROM COMPONENTS.

  SWALLOWING/INGESTION: MAY CAUSE IRRITATION, NAUSEA OR DIARRHEA. POSSIBLE ASPIRATION HAZARD.

  MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NONE (cont.)
SECTION V - HEALTH HAZARD DATA (cont.)

- EFFECTS OF OVEREXPOSURE: (cont.)

KNOW, BUT MAY AGGRAVATE PREVIOUSLY EXISTING SKIN DISORDERS.
LISTED AS A POTENTIAL CARCINOGEN OR CARCINOGEN? NOT LISTED
BY IARC, NTP, OR OSHA.
BASED ON PROPRIETARY ADDITIVE 5184 THIS PRODUCT MAY POSSIBLY
CAUSE EYE IRRITATION AND MAY CAUSE ALLERGIC SKIN REACTION.
BASED ON PROPRIETARY ADDITIVE 5183 THIS PRODUCT MAY CAUSE EYE
IRRITATION AND MAY CAUSE ALLERGIC SKIN REACTION.

-FIRST AID:
INHALATION: IF RESPIRATORY DISCOMFORT OR IRRITATION OCCURS,
MOVE PERSON TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE
ARTIFICIAL RESPIRATION AND GET MEDICAL ATTENTION IMMEDIATELY.

SKIN: WASH EXPOSED PORTION WITH SOAP AND WATER. LAUNDER
SOILED CLOTHES BEFORE REUSE.

EYES: IMMEDIATELY FLUSH EYES WITH WATER FOR A MINIMUM OF 15
MINUTES OCCASIONALLY LIFTING THE LOWER AND UPPER LIDS. IF FILM
OR IRRITATION PERSISTS, SEEK MEDICAL ATTENTION.

SWALLOWING/INGESTION: DO NOT INDUCE VOMITING; CONTACT
A PHYSICIAN.

SECTION VI - REACTIVITY DATA

ABILITY: [ ] Unstable [x] Stable
Hazardous Polymerization: [ ] May occur [x] Will not occur

-Incompatibility

STRONG OXIDIZERS.

-Conditions to Avoid:

AVOID CONDITIONS THAT COULD GENERATE AN OIL MIST. DO NOT
EXPOSE THE PRODUCT TO STRONG OXIDIZERS OR EXCESSIVE HEAT.
AVOID PROLONGED OR REPEATED SKIN CONTACT WITH NEW OR USED
PRODUCT.

-Hazardous Decomposition Products:

INCOMPLETE COMBUSTION CAN YIELD CARBON (SMOKE), CARBON
MONOXIDE, VARIOUS HYDROCARBONS, OTHER TOXIC GASES, VAPORS
OR PARTICULATES POSSIBLE.

SECTION VII - SPILL OR LEAK PROCEDURES

-Steps to be Taken in Case Material is Released or Spilled

NOTIFY EMERGENCY RESPONSE PERSONNEL. EVACUATE AREA AND REMOVE
IGNITION SOURCES. BUILD DIKE TO CONTAIN FLOW. REMOVE FREE
LIQUID, DO NOT FLUSH TO SEWER OR OPEN WATER. PICK UP
RESIDUE WITH INERT-ABSORBANT AND PLACE IN CLOSED CONTAINER
FOR DISPOSAL.
SECTION VII - SPILL OR LEAK PROCEDURES (cont.)

- WASTE DISPOSAL METHOD:
  EPA HAZARDOUS WASTE? NO, UNLESS OTHERWISE INDICATED. READ
  FURTHER IN THIS SECTION TO DETERMINE IF OTHER ITEMS NEED TO BE
  CONSIDERED WHICH MAY AFFECT ALL INFORMATION IN THIS SECTION.
  EPA HAZARDOUS WASTE CODE NUMBER--NOT APPLICABLE, UNLESS
  OTHERWISE INDICATED ELSEWHERE IN THIS SECTION.
  EPA WASTE CHARACTERISTIC OR HAZARD CODE--NOT APPLICABLE, UNLESS
  OTHERWISE INDICATED ELSEWHERE IN THIS SECTION.

  UTILIZE LICENSED WASTE DISPOSAL COMPANY. CONSIDER RECYCLING
  OR CONTROLLED INCINERATION. UTILIZE PERMITTED INDUSTRIAL
  WASTE DISPOSAL SITE. FOLLOW ALL LOCAL, STATE AND FEDERAL
  GUIDELINES. LIQUIDS ARE BANNED FROM LANDFILLING.

SECTION VIII - SPECIAL PROTECTION INFORMATION:

- RESPIRATORY PROTECTION:
  UP TO 25 MG/M3, HALF-MASK ORGANIC VAPOR RESPIRATOR. UP TO
  50 MG/M3, FULL-FACE ORGANIC VAPOR RESPIRATOR OR FULL-FACE
  SELF-CONTAINED RESPIRATOR. GREATER THAN 50 MG/M3, FIRE
  FIGHTING OR UNKNOWN CONCENTRATION, USE SELF-CONTAINED
  BREATHING APPARATUS WITH POSITIVE PRESSURE.

- VENTILATION:
  MAINTAIN LOCAL OR DILUTION VENTILATION TO KEEP AIR CONCENTRATION
  BELOW 5 MG/M3. REQUEST ASSISTANCE OF SAFETY AND INDUSTRIAL
  HYGIENE PERSONNEL TO DETERMINE AIR CONCENTRATION.

- PROTECTIVE GLOVES:
  FOR PROLONGED CONTACT OR FOR USED MOTOR OIL, USE NITRILE
  NEOPRENE GLOVES OR OTHER MATERIAL RESISTANT TO
  PETROLEUM OILS.

- EYE PROTECTION:
  SAFETY GLASSES, CHEMICAL GOGGLES OR FACE SHIELD AS APPROPRIATE
  FOR EXPOSURE.

- OTHER PROTECTIVE EQUIPMENT:
  NONE NORMALLY REQUIRED.

SECTION IX - SPECIAL PRECAUTIONS

- PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:
  STORE CLEAN, DRY, BELOW 120°F (50°C) TO PRESERVE FOR INTENDED
  USE. DO NOT STORE WITH STRONG OXIDIZERS. STORE AS OSHA
  CLASS III COMBUSTIBLE LIQUID.

- OTHER PRECAUTIONS:
  DOT HAZARDOUS MATERIAL? NO
  DOT SHIPPING NAME AND NUMBER - NOT APPLICABLE
  DOT HAZARD CLASS - NOT APPLICABLE

RECOMMENDED CONSUMER WARNING
WARNING: CONTAINS PETROLEUM HYDROCARBON LUBRICANT. MAY BE
HARMFUL IF INHALED OR SWALLOWED. USE ONLY WITH ADEQUATE
VENTILATION. IF INGESTED, DO NOT INDUCE VOMITING; CONTACT A
PHYSICIAN. USED MOTOR OIL HAS CAUSED SKIN CANCER IN ANIMAL
TESTS. AVOID PROLONGED SKIN CONTACT WITH USED OILS.

(cont.)
SECTION IX - SPECIAL PRECAUTIONS (cont.)

-OTHER PRECAUTIONS: (cont.)

KEEP AWAY FROM CHILDREN.

RECOMMENDED OSHA WARNING
WARNING: CONTAINS PETROLEUM HYDROCARBON LUBRICANT. MAY BE HARMFUL IF INHALED OR SWALLOWED. USE ONLY WITH ADEQUATE VENTILATION. USED MOTOR OIL HAS CAUSED SKIN CANCER IN ANIMAL TESTS. AVOID PROLONGED SKIN CONTACT WITH USED MOTOR OILS.
FIRST AID: INHALATION - REMOVE TO FRESH AIR. IF BREATHING HAS STOPPED, GIVE ARTIFICIAL RESPIRATION AND GET MEDICAL ATTENTION IMMEDIATELY. INGESTION - DO NOT INDUCE VOMITING; CONTACT A PHYSICIAN. EYE CONTACT - FLUSH WITH WATER FOR AT LEAST 15 MINUTES. IF FILM OR IRRITATION PERSISTS, SEEK MEDICAL ATTENTION. SKIN CONTACT - WASH EXPOSED PORTIONS WITH SOAP AND WATER.

CAUTION: EMPTY CONTAINERS RETAIN RESIDUE. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE THIS CONTAINER TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF IGNITION. DO NOT ATTEMPT TO CLEAN. EMPTY DRUMS SHOULD BE COMPLETELY DRAINED, PROPERLY BUNGED, AND PROMPTLY RETURNED TO A DRUM RECONDITIONER.

KEEP AWAY FROM CHILDREN.

REFER TO THE MATERIAL SAFETY DATA SHEET FOR ADDITIONAL INFORMATION.

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DISCLAIMER

THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS PUBLICATION HAVE BEEN COMPILED FROM SOURCES BELIEVED TO BE RELIABLE AND TO REPRESENT THE BEST CURRENT OPINION ON THE SUBJECT AT THE TIME OF PUBLICATION. SINCE WE CANNOT ANTICIPATE OR CONTROL THE MANY DIFFERENT CONDITIONS UNDER WHICH THIS INFORMATION OR OUR PRODUCTS MAY BE USED, WE MAKE NO GUARANTEE THAT THE RECOMMENDATIONS WILL BE ADEQUATE FOR ALL INDIVIDUALS OR SITUATIONS. EACH USER OF THE PRODUCT DESCRIBED HEREIN SHOULD DETERMINE THE SUITABILITY OF THE DESCRIBED PRODUCT FOR HIS PARTICULAR PURPOSE AND SHOULD COMPLY WITH ALL FEDERAL, STATE AND LOCAL RULES AND REGULATIONS CONCERNING THE DESCRIBED PRODUCT.

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ABBREVIATIONS:
N/A NOT APPLICABLE
N/K NOT KNOWN
N/AV NOT AVAILABLE
COC CLEVELAND OPEN CUP
PMCC PENSKY-MARTENS CLOSED CUP
G GRAM
MG MILLIGRAM

OSHA OCCUPATIONAL SAFETY & HEALTH ADMIN.
MAY REQUIRE NOTIFICATION BEFORE SALE IN AUSTRALIA, JAPAN, KOREA, THE PHILIPPINES AND SWITZERLAND DUE TO COMPONENTS OF PROPRIETARY ADDITIVE 5183.