TEXACO
MATERIAL SAFETY DATA SHEET

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

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MATERIAL IDENTITY
Product Code and Name: 01938 STARPLEX MOLY 2
Chemical Name and/or Family or Description: Automotive Greases
Manufacturer's Name and Address: Texaco Lubricants Company, a Division of Texaco Refining and Marketing Inc., P.O. Box 4427, Houston, TX 77210-4427
Telephone Numbers: TRANSPORTATION EMERGENCY Company: (914) 831-3400 CHEMTREC: (800) 424-9300
HEALTH EMERGENCY Company: (914) 831-3400 GENERAL MSDS ASSISTANCE (914) 838-7204 TECHNICAL INFORMATION Fuels: (914) 838-7336; Lubricants/Antifreezes: (914) 838-7509 Chemicals: (512) 459-6543

2. COMPOSITION/INFORMATION ON INGREDIENTS

Product and/or Component(s) Carcinogenic According to: OSHA IARC NTP OTHER NONE
Composition: Chemical/Common Name CAS No. Exposure Limit Range in %
* zinc dialkyldithiophosphate 101747777 None Established 1.00 - 3.99
* Molybdenum disulfide 1317335 10mg/m3 OSHA as Mo total dust 1.00 - 3.99
* Polymer dispersed in petroleum oil Mixture 72622837 None Established 1.00 - 3.99
Hydrotreated C25 bright stock-based lubricating oil
Solvent-dewaxed heavy paraffinic petroleum distillates 64742650 5mg/m3 OSHA (MIST) 20.00 - 34.99
5mg/m3 ACGIH (MIST) 10mg/m3 STEL (MIST)
Lithium 12-hydroxystearate 7620771 None Established 4.00 - 10.99

Product is hazardous according to OSHA (1910.1200).
* Component(s) is hazardous according to OSHA or one or more state Right-to-Know laws.

3. HAZARD IDENTIFICATION

EMERGENCY OVERVIEW
Appearance and Odor: Dark gray, tacky grease; slight additive odor

WARNING STATEMENT
CAUTION! MAY CAUSE IRRITATION TO EYES AND SKIN

HMIS Health: 1 Reactivity: 0 Health: 1 Reactivity: 0
Flammability: 1 Special: - Flammability: 1 Special: -

N.D. - Not Determined N.A. - Not Applicable N.T. - Not Tested
3. HAZARD IDENTIFICATION (CONT)

POTENTIAL HEALTH EFFECTS

EYE SKIN INHALATION INGESTION

Primary Route of Exposure:

Acute

Effects of Overexposure

Eyes:
May cause irritation, experienced as mild discomfort and seen as slight excess redness of the eye.

Skin:
Brief contact may cause slight irritation. Prolonged contact, as with clothing wetted with material, may cause more severe irritation and discomfort, seen as local redness and swelling.

No adverse effects expected from absorption of material through the skin.

Inhalation:
Product not volatile at ambient temperatures. No adverse effects expected from vapor generated at ambient temperatures.

Ingestion:
No adverse effects expected. If more than several mouthfuls are swallowed, abdominal discomfort, nausea, and diarrhea may occur.

Sensitization Properties:
Unknown.

Chronic:
No adverse effects anticipated.

Medical Conditions Aggravated by Exposure:
Because of its irritating properties, repeated skin contact may aggravate an existing dermatitis (skin condition).

Other Remarks:
None

4. FIRST AID MEASURES

Eyes:
Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Get medical attention.

Skin:
Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists.

Ingestion:
If more than several mouthfuls have been swallowed, give two glasses of water (16 oz.). Get medical attention.

Inhalation:
If irritation or drowsiness occurs, remove to fresh air.

Other Instructions:
None

5. FIRE-FIGHTING MEASURES

Flammable Limits (%) Lower: N.D.  Upper: N.D.

N.D. - Not Determined  N.A. - Not Applicable  N.T. - Not Tested
< - Less Than  > - Greater Than
5. FIRE-FIGHTING MEASURES (CONT)

Recommended Fire Extinguishing Agents And Special Procedures:
According to NFPA Guide, use water spray, dry chemical, foam, or carbon
dioxide. Water or foam may cause frothing. Use water to cool fire-exposed
containers. If a leak or spill has not ignited, use water spray to
disperse the vapors and to provide protection for persons attempting to
stop the leak.

Unusual or Explosive Hazards:
None

6. ACCIDENTAL RELEASE MEASURES (Transportation Spills Call: CHEMTREC (800) 424-9300)

Procedures in Case of Accidental Release, Breakage or Leakage:
Contain spill if possible, contain with absorbent materials such as clay or
soil, and shovel up. Avoid skin and eye contact.

7. HANDLING AND STORAGE

Precautions to be Taken in Handling and Storage:
Minimum feasible handling temperatures should be maintained. Periods of
exposure to high temperatures should be minimized. Water contamination
should be avoided.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective Equipment (Type)
Eye/Face Protection:
Chemical-type goggles or face shield recommended to prevent eye contact.

Skin Protection:
Workers should wash exposed skin several times daily with soap and water.
Soiled work clothing should be laundered or dry-cleaned at least once a
week.

Respiratory Protection:
Airborne concentrations should be kept to lowest levels possible. If
vapor, mist or dust is generated, use respirator approved by MSHA or NIOSH
as appropriate. Supplied air respiratory protection should be used for
cleaning large spills or upon entry into tanks, vessels, or other confined
spaces. See below for applicable permissible concentrations.

Ventilation:
Adequate to meet component occupational exposure limits (see Section 2).

Exposure Limit for Total Product:
None established for product. Refer to component permissible
concentrations.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Dark gray, tacky grease; slight additive odor
Boiling Point (Degrees F.): N.D. Percent VOC: N.D.
Specific Gravity: 0.95 Vapor Density: N.D. Air=1
(H2O=1) Solubility in Water: Negligible
pH of undiluted product: N.A. N.A.
Vapor Pressure: Negligible mmhg
Viscosity: N.D. Other: N.D.
10. STABILITY AND REACTIVITY

This Material Reacts Violently With:  (If others is checked below, see comments for details)

Air  Water  Heat  Strong Oxidizers  Others  None of These

Comments:

None

Products Evolved When Subjected to Heat or Combustion:
Toxic levels of carbon monoxide, carbon dioxide, irritating aldehydes and ketones, and combustion products or compounds of lithium, molybdenum, phosphorus, sulfur, zinc

Hazardous Polymerizations:


11. TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION (ANIMAL TOXICITY DATA)

Median Lethal Dose (LD50 LC50) (Species)
Oral: Believed to be > 5 g/kg (rat); practically non-toxic
Inhalation: N.D.
Dermal: Believed to be > 3 g/kg (rabbit); practically non-toxic

Irritation Index, Estimation of Irritation (Species)
Skin: Similar product - 1.8/3/6.0 (rabbit); slightly irritating
Eyes: Similar product - 9.0/110 (rabbit); slightly irritating

Other:

Sensitization: N.D.

12. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHODS
This product has been evaluated for RCRA characteristics and does not meet the criteria of a hazardous waste if discarded in its purchased form. Under RCRA, it is the responsibility of the user of the product to determine at the time of disposal, whether the product meets RCRA criteria for hazardous waste. This is because product uses, transformations, mixtures, processes, etc. may render the resulting materials hazardous.

REMARKS
None

13. TRANSPORT INFORMATION

TRANSPORTATION
DOT: PROPER SHIPPING NAME: N.D.
IMDG: PROPER SHIPPING NAME: N.D.
IATA: PROPER SHIPPING NAME: N.D.
TDG: PROPER SHIPPING NAME: N.D.
14. REGULATORY INFORMATION

A. SARA TITLE III
   Title III Section 302/304 Extremely Hazardous Substance:
   Component | CAS No. | Percent | RQ (lbs) | TPQ (lbs)
   None

   CERCLA Section 102(a) Hazardous Substance
   Component | CAS No. | Percent | RQ (lbs)
   None

   Title III Section 311 Hazard Categorization
   Acute Chronic Fire Pressure Reactive Not Applicable
   X   

   Title III Section 313 Toxic Chemicals
   Component | CAS No. | Percent
   Zinc dialkyldithiophosphate | 101747777 | 1.00-3.99

B. WHMIS CLASSIFICATION
   N.A.

C. MICHIGAN CRITICAL MATERIALS
   Michigan criticals materials 0.26% zinc

15. OTHER INFORMATION

THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE ACCURATE. IT IS PROVIDED INDEPENDENTLY OF ANY SALE OF THE PRODUCT FOR PURPOSE OF HAZARD COMMUNICATION AS PART OF TEXACO'S PRODUCT SAFETY PROGRAM. IT IS NOT INTENDED TO CONSTITUTE PERFORMANCE INFORMATION CONCERNING THE PRODUCT. NO EXPRESS WARRANTY, OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE WITH RESPECT TO THE PRODUCT OR THE INFORMATION CONTAINED HEREIN. DATA SHEETS ARE AVAILABLE FOR ALL TEXACO PRODUCTS. YOU ARE URGED TO OBTAIN DATA SHEETS FOR ALL TEXACO PRODUCTS YOU BUY, PROCESS, USE OR DISTRIBUTE AND YOU ARE ENCOURAGED AND REQUESTED TO ADVISE THOSE WHO MAY COME IN CONTACT WITH SUCH PRODUCTS OF THE INFORMATION CONTAINED HEREIN.

TO DETERMINE APPLICABILITY OR EFFECT OF ANY LAW OR REGULATION WITH RESPECT TO THE PRODUCT, USER SHOULD CONSULT HIS LEGAL ADVISOR OR THE APPROPRIATE GOVERNMENT AGENCY. TEXACO DOES NOT UNDERTAKE TO FURNISH ADVICE ON SUCH MATTERS.

Date: 07-23-91  New  X Revised, Supersedes: 07-23-91
Date Printed: 01-09-92

Inquiries regarding MSDS should be directed to:
Texaco Inc.
Manager, Product Safety
P.O. Box 509
Beacon, N.Y. 12508

PLEASE SEE NEXT PAGE FOR PRODUCT LABEL
READ AND UNDERSTAND MATERIAL SAFETY DATA SHEET BEFORE HANDLING OR DISPOSING OF PRODUCT

01938 STARPLEX MOLY 2

WARNING STATEMENT
CAUTION! MAY CAUSE IRRITATION TO EYES AND SKIN

PRECAUTIONARY MEASURES
- Avoid prolonged breathing of mist or vapor in excess of permissible concentrations.
- Chemical type goggles or face shield recommended to prevent eye contact.
- Workers should wash exposed skin several times daily with soap and water. Work clothing should be cleaned at least once a week.

FIRST AID

INGESTION:
If more than several mouthfuls have been swallowed, give two glasses of water (16 oz.). Get medical attention.

INHALATION:
If irritation or drowsiness occurs, remove to fresh air.

EYE CONTACT:
Immediately flush eyes with plenty of water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Get medical attention.

SKIN CONTACT:
Wash skin with plenty of soap and water for several minutes. Get medical attention if skin irritation develops or persists.

FIRE
In case of fire, use foam, dry chemical, or CO2. Use water spray to keep containers cool.

Chemical/Common Name | CAS No. | Range in %
--- | --- | ---
* Zinc dialkyldithiophosphate | 101747777 | 1.00 - 3.99
* Molybdenum disulfide | 1317335 | 1.00 - 3.99
* Polymer dispersed in petroleum oil | MIXTURE | 1.00 - 3.99
Hydrotreated C25 bright stock-based lubricating oil | 72823937 | 50.00 - 64.99
Solvent-dewaxed heavy paraffinic petroleum distillates | 64742650 | 20.00 - 34.99
Lithium 12-hydroxystearate | 7620771 | 4.00 - 10.99

Product is hazardous according to OSHA (1910.1200).
* Component(s) is hazardous according to OSHA or one or more state Right-to-Know laws.
Not classified as a hazardous material by DOT definition.

HMIS
Health: 1 | Reactivity: 0 | Flammability: 1 | Special: -

National Fire Protection Association
Health: 1 | Reactivity: 0 | Flammability: 1 | Special: -

CAUTION: Misuse of empty containers can be hazardous. Empty containers can be hazardous if used to store toxic, flammable, or reactive materials. Cutting or welding of empty containers might cause fire, explosion or toxic fumes from residues. Do not pressurize or expose to open flame or heat. Keep container closed and drum bungs in place.

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a Division of Texaco Refining and Marketing Inc.
P.O. Box 4427, Houston, TX 77210-4427

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