MATERIAL SAFETY DATA SHEET

Date Issued: 12/13/02

SECTION A - IDENTIFICATION & EMERGENCY INFORMATION

Manufacturer's Name: Castrol Heavy Duty Lubricants Inc.

Emergency Telephone Number: 410-574-5000

800-777-1466

··Address:

9300 Pulaski Highway

Baltimore, MD 21220

PRODUCT NAME: Castrol MP Dexron III/Mercon

Chemical Family: Petroleum Oil (Automatic Transmission Fluid)

Product Appearance & Odor: Clear Red Liquid.

Mild. Bland Petroleum Odor

Part Number: 2500

CAS Number (For Finished Product):

COMPLEX MIXTURE CAS Number Not Applicable

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)

Health - I Flammability - 1 Reactivity - 0

Hazard Rating: Least-0 Slight-1 Moderate-2 High-3 Extreme-4

SECTION B - COMPONENTS & HAZARD INFORMATION

COMPONENTS

CAS NO. OF COMPONENTS

APPROXIMATE CONCENTRATION

Lubricating Oil Base Stock

64741-88-4

Greater than 80%

oprietary Additives

Mixture

Less than 20%

Exposure Limit for Total Product: 5mg/m³ oil mist for an 8-hour workday. Basis: OOHS Reg. 29 CFR 1910.1000

CERLA Hazardous Substances: None known. If this product is accidentally spilled, it is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). We recommend you contact local authorities to determine if there may be other local reporting requirements. US TSCA Inventory: All components of this material are on the US TSCA Inventory. Threshold Planning Quantity (TPQ), EPA Regulation 40 CFR 355 Extremely Hazardous Substances (SARA Sections 301-304): None. Toxic Chemical Release Reporting, EPA Regulation 40 CFR 372 (SARA Section 313): Not Applicable.

SECTION C - PHYSICAL DATA (THE FOLLOWING DATA ARE APPROXIMATE OR TYPICAL VALUES.)

Boiling Range: Not Determined

Specific Gravity (H₂O=1): .8660 approx.

Pour Point: -50°C

Viscosity: 100°C cSt 7.34 approx.

Solubility in Water: Negligible, less than 0.1%

Percent Volatile by Volume: NEGLIGIBLE

Vapor Pressure: NEGLIGIBLE

Vapor Density: GREATER THAN AIR

Evaporation Rate: NEGLIGIBLE

SECTION D - FIRE PROTECTION INFORMATION

FLASH POINT & METHOD: Min. ASTM D-92 C.O.C. °C, (°F.) 183 (360)

> NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)-Hazard Identification

Health - 1 Flammability - 1

Reactivity - 0 Basis: Recommended by Castrol Heavy Duty Lubricants Inc.

Hazard Rating (NFPA): 4-Extreme 3-High 2-Moderate 1-Slight 0-Insignificant

AUTO IGNITION TEMPERATURE:

Not Determined

UNUSUAL FIRE & EXPLOSION HAZARDS:

None

Flammability Limits (% by volume in air): Lower: Not determined Upper: Not determined SECTION D - FIRE PROTECTION INFORMATION (Continued)

HANDLING PRECAUTIONS: Use product with caution around heat, Water or foam may cause frothing. Use water to keep fire-exposed contain-

aarks, pilot lights, static electricity and open flame.

tion products, in the case of incomplete combustion.

authorities or appropriate specialists.

tion Guide on Hazardous Materials. Use water spray, dry chemical, foam, or carbon dioxide to extinguish the fire.

ers cool. Water spray may be used to flush spills away from exposures. COMPOSITION PRODUCTS UNDER FIRE CONDITIONS: Minimize breathing of gases, vapor, fumes or decomposition products. Use simes, smoke, carbon monoxide, sulfur oxides, and other decomposi- supplied-air breathing equipment for enclosed or confined spaces or as otherwise needed.

EXTINGUISHING MEDIA & FIRE FIGHTING PROCEDURES: EMPTY CONTAINER WARNING: "Empty" containers retain residue Foam, water spray (fog), dry chemical, carbon dioxide and vaporizing (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, liquid type extinguishing agents may all be suitable for extinguishing WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH fires involving this type of product, depending on the size or potential CONTAINERS TO HEAT, FLAME, SPARKS OR OTHER SOURCES OF size of fire and circumstances related to the situation. Plant fire protection in the control of the con tion and response strategy through consultation with local fire protection Do not attempt to clean since residue is difficult to remove. "Empty" drums should be completely drained, properly bunged and promptly returned to a The following procedures for this type of product are based on the rec- drum reconditioner. All other containers should be disposed of in an enviommendations in the National Fire Protection Associations' Fire Protection associations on mentally safe manner and in accordance with governmental regulations.

SECTION E - PROTECTION & PRECAUTIONS

in air. No smoking, flame or other ignition sources.

RESPIRATORY PROTECTION: Use-supplied-air-respiratory-protection tion in confined or enclosed spaces, if needed.

avoid prolonged or repeated skin contact.

tact may occur.

OTHER PROTECTIVE EQUIPMENT: Use chemical-resistant apron oughly with soap and water. or other impervious clothing, if needed, to avoid contaminating regular clothing, which could result in prolonged or repeated skin contact.

VENTILATION: Use local exhaust to capture vapor, mists or fumes, if WORK PRACTICES / ENGINEERING CONTROLS: Keep containers necessary. Provide ventilation sufficient to prevent exceeding recom- closed when not is use. Do not store near heat, sparks, flame or strong oximended exposure limit or buildup of explosive concentrations of vapor dants. In order to prevent fire or explosion hazards, use appropriate equip-

PERSONAL HYGIENE: Minimize breathing vapor, mist-or-fumes. Avoidprolonged or repeated contact with skin. Remove contaminated clothing: PROTECTIVE GLOVES: Use chemical-resistant gloves, if needed, to launder or dry-clean before reuse. Remove contaminated shoes and thoroughly clean before reuse; discard if oil-soaked. Cleanse skin thoroughly af-EYE PROTECTION: Use splash goggles or face shield when eye con- ter contact, before breaks and meals, and at end of work period. Product is readily removed skin by waterless hand cleaners followed by washing thor-

> VARIABILITY-AMONG INDIVIDUALS: Health studies have shown that many petroleum hydrocarbons and synthetic lubricants pose potential human health risks, which may vary from person to person. As a precaution, exposure to liquids, vapors, mists or fumes should be minimized.

SECTION F - SPILL OR LEAK PROCEDURE

rate authorities. US Coast Guard Regulations require immediate report-vise authorities if the product has entered or may enter sewers, watercourses, ing of spills that could reach any waterway including intermittent dry or extensive land areas. ASSURE CONFORMITY WITH ALL creeks. Report spill to the Coast Guard toll free number 800-424-8802. APPLICABLE REGULATIONS. PROCEDURES IF MATERIAL IS RELEASED OR SPILLED: Re- WASTE DISPOSAL: Dispose of in an environmentally safe manner and in

to the spill area. Minimize breathing vapors. Minimize skin contact.

NVIRONMENTAL IMPACT: Report spills as required to the appro- Keep product out of sewers and watercourses by dicing or impounding. Ad-

cover free product. Add sand, earth, or other suitable absorbent material accordance with all government regulations to include Federal, State, and local requirements.

SECTION G - REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur.

CONDITIONS & MATERIALS TO AVOID: Avoid heat, open flames dentified organic compounds may be formed upon combustion. 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 combustion. Carbon monoxide and other uni-

SECTION H - EMERGENCY & FIRST AID PROCEDURES-AND PRIMARY ROUTES OF ENTRY

nated clothing and wash skin thoroughly with soap and water.

INGESTION: If ingested, DO NOT induce vomiting, call a physician further exposure until excessive mist oil condition subsides. immediately.

EYE CONTACT: If splashed into the eyes, flush with clear water for INHALATION: Vapor pressure is very low. Vapor inhalation under ambi-15 minutes or until irritation subsides. If irritations persist, call a physi- ent temperature conditions is not normally a problem. If overcome by vapor cian. SKIN CONTACT: In case of skin contact, remove any contami- from hot product, immediately remove from exposure and call a physician. Administer oxygen, if available. If over-exposed to oil mist, remove from

SECTION I - EFFECTS OF OVEREXPOSURE

SKIN: Prolonged or repeated skin contact may cause skin irritation, EYE: May cause eye irritation. INGESTION: Relatively nontoxic.

SECTION J - TRANSPORTATION INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT) - DOT Identification Number: Not Regulated.

THE PRECISE COMPOSITION OF THIS MIXTURE IS PROPRIETARY INFORMATION. A MORE COMPLETE DISCLOSURE WILL BE PROVIDED TO A PHYSICIAN OR NURSE IN THE EVENT OF A MEDICAL EMERGENCY.