# SAFETY DATA SHEET



Castrol Pyroplex Blue 1

## **Section 1. Identification**

**GHS** product identifier

Castrol Pyroplex Blue 1

Castrol Pyroplex Blue 2

**Product code** 

455339-CA01 US06 US81

PetroLeum oil Grease

SDS#

455339

**Historic SDS #:** 

0000002021

Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/

Grease for industrial applications.

mixture

For specific application advice see appropriate Technical Data Sheet or consult our

company representative.

Manufacturer

BP Lubricants USA, Inc 1500 Valley Road Wayne, NJ USA

07470

Supplier

Wakefield Canada, Limited 3620 Lakeshore Blvd West Toronto, Ontario, Canada

M8W 1P2

Phone Number - 416-252-5511 Fax Number - 416-252-7315

BP Lubricants USA, Inc. 1500 Valley Road Wayne, NJ USA

07470

Phone Number - 973-633-2296 Fax Number - 973-633-7475

**EMERGENCY HEALTH** 

1 (800) 447-8735

**INFORMATION:** 

Outside the US: +1 703-527-3887 (CHEMTREC)

**EMERGENCY TELEPHONE** 

NUMBER

1 (800) 424-9300 CHEMTREC (USA)

## Section 2. Hazard identification

Classification of the substance or mixture EYE IRRITATION - Category 2A

**GHS label elements** 

Hazard pictograms



Signal word

Warning

**Hazard statements** 

H319 - Causes serious eye irritation.

**Precautionary statements** 

General

P103 - Read label before use.

P102 - Keep out of reach of children.

P101 - If medical advice is needed, have product container or label at hand.

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**US81** 

Language ENGLISH

**Format Canada** 

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#### Section 2. mazard identification

Prevention P280 - Wear eye or face protection.

P264 - Wash hands thoroughly after handling.

Response P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P313 - If eye irritation persists: Get medical attention.

Storage Disposal Not applicable. Not applicable.

Other hazards which do not

Defatting to the skin.

result in classification Note: High Pressure Applications

Injections through the skin resulting from contact with the product at high pressure

constitute a major medical emergency.

See 'Notes to physician' under First-Aid Measures, Section 4 of this Safety Data

Sheet:

# Section 3. Composition/information on ingredients

Substance/mixture

Mixture

Highly refined base oil (IP 346 DMSO extract < 3%). Thickening agent. Proprietary performance additives.

Ingredient name	CAS number	% (w/w)
Base oil - highly refined	 Varies - See Key to	80 - 89.9
Zinc bis[O,O-bis(2-ethylhexyl)] bis(dithiophosphate)	abbreviations 4259-15-8	1 - 2.999

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First-aid measures

### Description of necessary first aid measures

Eye contact In case of contact, immediately flush eyes with plenty of water for at least 15

minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing.

Check for and remove any contact lenses. Get medical attention.

Skin contact Wash skin thoroughly with soap and water or use recognized skin cleanser.

Remove contaminated clothing and shoes. Wash clothing before reuse. Clean

shoes thoroughly before reuse. Get medical attention if symptoms occur.

Inhalation If inhaled, remove to fresh air. In case of inhalation of decomposition products in a

fire, symptoms may be delayed. The exposed person may need to be kept under

medical surveillance for 48 hours. Get medical attention if symptoms occur.

Ingestion Do not induce vomiting unless directed to do so by medical personnel. Never give

> anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Get medical attention if adverse

health effects persist or are severe.

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. It

may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

#### Most important symptoms/effects, acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

### Indication of immediate medical attention and special treatment needed, if necessary

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### Section 4. First-aid measures

Notes to physician

In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Treatment should in general be symptomatic and directed to relieving any effects.

Note: High Pressure Applications

Injections through the skin resulting from contact with the product at high pressure constitute a major medical emergency. Injuries may not appear serious at first but within a few hours tissue becomes swollen, discolored and extremely painful with extensive subcutaneous necrosis.

Surgical exploration should be undertaken without delay. Thorough and extensive debridement of the wound and underlying tissue is necessary to minimize tissue loss and prevent or limit permanent damage. Note that high pressure may force the product considerable distances along tissue planes.

Specific treatments

No specific treatment.

# Section 5. Fire-fighting measures

### Extinguishing media

Suitable extinguishing

media

In case of fire, use water fog, alcohol resistant foam, dry chemical or carbon dioxide

extinguisher or spray.

Unsuitable extinguishing media

Do not use water jet.

Specific hazards arising from the chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

Hazardous thermal decomposition products Combustion products may include the following:

carbon dioxide carbon monoxide nitrogen oxides sulfur oxides phosphorus oxides

Special protective actions for fire-fighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if

there is a fire. No action shall be taken involving any personal risk or without

suitable training.

Special protective equipment for fire-fighters Fire-fighters should wear positive pressure self-contained breathing apparatus

(SCBA) and full turnout gear.

# Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Put on appropriate personal protective equipment. Floors may be slippery; use care to avoid falling. Contact emergency personnel.

For emergency responders

Entry into a confined space or poorly ventilated area contaminated with vapor, mist or fume is extremely hazardous without the correct respiratory protective equipment and a safe system of work. Wear self-contained breathing apparatus. Wear a suitable chemical protective suit. Chemical resistant boots. See also the information in "For non-emergency personnel".

**Environmental precautions** 

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

Small spill

Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

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### Section 6. Accidental release measures

### Large spill

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Contaminated absorbent material may pose the same hazard as the spilled product. If emergency personnel are unavailable, contain spilled material. Suction or scoop the spill into appropriate disposal or recycling vessels, then cover spill area with oil absorbent. Dispose of via a licensed waste disposal contractor.

## Section 7. Handling and storage

### Precautions for safe handling

#### Protective measures

Put on appropriate personal protective equipment (see Section 8). Avoid breathing vapor or mist. Avoid contact with eyes, skin and clothing. Do not ingest. Empty containers retain product residue and can be hazardous. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Do not reuse container.

### Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash thoroughly after handling. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Store and use only in equipment/containers designed for use with this product. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

### Not suitable

Prolonged exposure to elevated temperature

## Section 8. Exposure controls/personal protection

#### **Control parameters**

### Occupational exposure limits

Ingredient name	Exposure limits
Base oil - highly refined	CA Alberta Provincial (Canada).
	15 min OEL: 10 mg/m³ 15 minutes. Issued/Revised: 7/2009 Form: Mist 8 hrs OEL: 5 mg/m³ 8 hours. Issued/Revised: 4/2004
	Form: Mist CA Quebec Provincial (Canada).
	STEV: 10 mg/m³ 15 minutes. Issued/Revised: 1/2000 Form: mist TWAEV: 5 mg/m³ 8 hours. Issued/Revised: 1/2000 Form: mist

### Appropriate engineering controls

All activities involving chemicals should be assessed for their risks to health, to ensure exposures are adequately controlled. Personal protective equipment should only be considered after other forms of control measures (e.g. engineering controls) have been suitably evaluated. Personal protective equipment should conform to appropriate standards, be suitable for use, be kept in good condition and properly maintained.

Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards. For further information contact your national organisation for standards.

Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. The final choice of protective equipment will depend upon a risk assessment. It is

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## Section 8. Exposure controls/personal protection

### **Environmental exposure** controls

important to ensure that all items of personal protective equipment are compatible.

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### **Individual protection measures**

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection Skin protection Hand protection

Safety glasses with side shields.

Wear protective gloves if prolonged or repeated contact is likely. Wear chemical resistant gloves. Recommended: Nitrile gloves. The correct choice of protective gloves depends upon the chemicals being handled, the conditions of work and use, and the condition of the gloves (even the best chemically resistant glove will break down after repeated chemical exposures). Most gloves provide only a short time of protection before they must be discarded and replaced. Because specific work environments and material handling practices vary, safety procedures should be developed for each intended application. Gloves should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

**Body protection** 

Use of protective clothing is good industrial practice.

Cotton or polyester/cotton overalls will only provide protection against light superficial contamination that will not soak through to the skin. Overalls should be laundered on a regular basis. When the risk of skin exposure is high (e.g. when cleaning up spillages or if there is a risk of splashing) then chemical resistant aprons and/or impervious chemical suits and boots will be required.

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

In case of insufficient ventilation, wear suitable respiratory equipment. For protection against metal working fluids, respiratory protection that is classified as "resistant to oil" (class R) or oil proof (class P) should be selected where appropriate. Depending on the level of airborne contaminants, an air-purifying, halfmask respirator (with HEPA filter) including disposable (P- or R-series) (for oil mists less than 50mg/m3), or any powered, air-purifying respirator equipped with hood or helmet and HEPA filter (for oil mists less than 125 mg/m3).

Where organic vapours are a potential hazard during metalworking operations, a

combination particulate and organic vapour filter may be necessary.

The correct choice of respiratory protection depends upon the chemicals being handled, the conditions of work and use, and the condition of the respiratory equipment. Safety procedures should be developed for each intended application. Respiratory protection equipment should therefore be chosen in consultation with the supplier/manufacturer and with a full assessment of the working conditions.

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## Section 9. Physical and chemical properties

<u>Appearance</u>

Physical state

Grease

Color

Blue.

Odor

Petroleum

Odor threshold

Not available.

pН

Not available.

**Melting point** 

Not available.

**Boiling point** 

Not available.

Flash point

Open cup: 232°C (449.6°F) [Cleveland.]

Pour point **Drop Point** 

Not available.

**Evaporation rate** 

Not available.

Flammability (solid, gas)

Not available. Not applicable. Based on - Physical state

Lower and upper explosive

Not available.

(flammable) limits

Vapor pressure Vapor density

Not available. Not available.

Density

890 kg/m³ (0.89 g/cm³) at 15°C

Relative density

Not available.

Solubility

insoluble in water.

Partition coefficient: n-

Not available.

octanol/water

Not available.

Auto-ignition temperature **Decomposition temperature** 

Not available.

Viscosity

Not available.

**Aerosol product** 

## Section 10. Stability and reactivity

Reactivity

No specific test data available for this product. Refer to Conditions to avoid and

Incompatible materials for additional information.

**Chemical stability** 

The product is stable.

Possibility of hazardous

reactions

Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous polymerization will not

occur.

Date of issue 12/13/2016.

Conditions to avoid

Avoid all possible sources of ignition (spark or flame).

Incompatible materials

Reactive or incompatible with the following materials: oxidizing materials.

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

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## Section 11. I oxicological information

Information on toxicological effects

Information on the likely routes of exposure

Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact

Causes serious eye irritation.

Skin contact

Defatting to the skin. May cause skin dryness and irritation.

Inhalation

Exposure to decomposition products may cause a health hazard. Serious effects

may be delayed following exposure.

Ingestion

No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact

Adverse symptoms may include the following:

pain or irritation

watering redness

Inhalation

No specific data.

Skin contact

Adverse symptoms may include the following:

irritation dryness cracking

Ingestion

No specific data.

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

**Potential immediate** 

Not available.

effects

Potential delayed effects

Not available.

Long term exposure

Potential immediate

Not available.

effects

Potential delayed effects

Not available.

Potential chronic health effects

General

No known significant effects or critical hazards. No known significant effects or critical hazards.

Carcinogenicity

Mutagenicity

No known significant effects or critical hazards.

Teratogenicity

Developmental effects

No known significant effects or critical hazards. No known significant effects or critical hazards.

Fertility effects

No known significant effects or critical hazards.

Numerical measures of toxicity

**Acute toxicity estimates** 

Not available

Section 12. Ecological information

**Toxicity** 

No testing has been performed by the manufacturer.

Persistence and degradability

Expected to be biodegradable.

**Bioaccumulative potential** 

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This product is not expected to bioaccumulate through food chains in the environment.

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## Section 12. Ecological information

**Mobility in soil** 

Soil/water partition coefficient (Koc)

Not available.

Mobility

Spillages are unlikely to penetrate the soil.

Other ecological information

This product is unlikely to disperse in water.

## Section 13. Disposal considerations

**Disposal methods** 

The generation of waste should be avoided or minimized wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	DOT Classification	TDG Classification	IMDG	IATA
UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
UN proper shipping name	- 111 11 11 11 11 11 11 11 11 11 11 11 1			
Transport hazard class(es)		<b>-</b>	**************************************	
Packing group	- : : : : : : : : : : : : : : : : : : :	-	-	- : : : : : : : : : : : : : : : : : : :
Environmental hazards	No.	No.	No	No.
Additional information	:			

Special precautions for user

Not available.

Transport in bulk according to Annex II of MARPOL and

Not available.

the IBC Code

## Section 15. Regulatory information

Other regulations

Version 7.02

Australia inventory (AICS) All components are listed or exempted.

Canada inventory All components are listed or exempted.

China inventory (IECSC) All components are listed or exempted.

Japan inventory (ENCS) At least one component is not listed.

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## Section 15. Regulatory information

Korea inventory (KECI)

At least one component is not listed.

Philippines inventory

(PICCS)

All components are listed or exempted.

**Taiwan Chemical** 

Substances Inventory

(TCSI)

Not determined.

**United States inventory** 

(TSCA 8b)

All components are listed or exempted.

**REACH Status** 

For the REACH status of this product please consult your company contact, as

identified in Section 1.

## Section 16. Other information

### History

Date of issue/Date of

13/12/2016

revision

Date of previous issue

12/12/2016.

Version

7.02

Prepared by

**Product Stewardship** 

Key to abbreviations

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

CAS Number = Chemical Abstracts Service Registry Number

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

HPR = Hazardous Products Regulations

Varies = may contain one or more of the following 101316-69-2, 101316-70-5, 101316-71-6, 101316-72-7, 64741-88-4, 64741-89-5, 64741-95-3, 64741-96-4, 64741-97-5, 64742-01-4, 64742-44-5, 64742-45-6, 64742-52-5, 64742-53-6, 64742-54-7, 64742-55-8, 64742-56-9, 64742-57-0, 64742-58-1, 64742-62-7, 64742-63-8, 64742-64-9, 64742-65-0, 64742-70-7, 72623-85-9, 72623-86-0,

72623-87-1, 74869-22-0, 90669-74-2

#### References

Not available.

### $\overline{m{\mathscr{V}}}$ Indicates information that has changed from previously issued version.

### **Notice to reader**

All reasonably practicable steps have been taken to ensure this data sheet and the health, safety and environmental information contained in it is accurate as of the date specified below. No warranty or representation, express or implied is made as to the accuracy or completeness of the data and information in this data sheet.

The data and advice given apply when the product is sold for the stated application or applications. You should not use the product other than for the stated application or applications without seeking advice from BP Group.

It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The BP Group shall not be responsible for any damage or injury resulting from use, other than the stated product use of the material, from any failure to adhere to recommendations, or from any hazards inherent in the nature of the material. Purchasers of the product for supply to a third party for use at work, have a duty to take all necessary steps to ensure that any person handling or using the product is provided with the information in this sheet. Employers have a duty to tell employees and others who may be affected of any hazards described in this sheet and of any precautions that should be taken. You can contact the BP Group to ensure that this document is the most current available. Alteration of this document is strictly prohibited.

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3/25/03

As of

CASTROL EP GREASE 2

MWD

MSDS ID: 13010A

A. Chemical Product and Company Identification

Product Name: CASTROL EP GREASE 2 General Use: See Product Data Sheet

Product Description: See Product Data Sheet.

MSDS Code: 13010A

Synonyms/Trade Names: Same as product name.

CASTROL IS REGISTERED IN THE U.S. PATENT AND TRADEMARK OFFICE.

Manufacturer: Castrol Industrial North America Inc.

Address (Line 1): 1001 West 31st Street

Address (Line 2): Downers Grove, IL 60515-1280 Emergency Phone: 1-800-424-9300 (CHEMTREC)

Information Phone: 1-800-621-2661

Regulatory Questions/MSDS Preparation - SHEA Department Product Chemistry/Application Questions - Technical Support

If available in Canada, this product is supplied by:

Castrol Canada Inc.

3660 Lakeshore Blvd. West Toronto, Ontario M8W 1P2

Information Phone: 416-252-5511

\_\_\_\_\_\_

### B. Composition/Information on Ingredients

Ingredient Name

CAS Number

DISTILLATES, PETROLEUM, HYDROTREATED

64742-54-7 90 - 95%

HEAVY PARAFFINIC

Contains no other ingredients now known to be hazardous as defined by OSHA

Exposure Guideline CAS Number

If applicable, the exposure limits listed are found in the ACGIH TLV guide for TWA unless otherwise noted.

\_\_\_\_\_\_

64742-54-7 5mg/M3; TWA

313 Listed Chemicals

If none listed here, or in Section O, there are no 313 chemicals present ab ve threshold value.

CASTROL EP GREASE 2

MWD

MSDS ID: 13010A

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### C. Hazards Identification

Appearance:

Amber grease, odorless.

MAY CAUSE EYE AND SKIN IRRITATION. MIST MAY CAUSE RESPIRATORY TRACT IRRITATION. AVOID CONTACT WITH EYES, SKIN & CLOTHING. AVOID BREATHING MISTS. WASH THOROUGHLY AFTER HANDLING.

Potential Health Effects

Eye: May cause eye irritation.

Skin Contact: May cause skin irritation. Skin Absorption: No acute effects expected.

Ingestion: Oral LD50 not established. Do not ingest.

Inhalation: TLV for product not established. Refer to Hazardous Materials List for ingredient TLV's.

Chronic Effects: Prolonged or repeated contact with petroleum oil may remove

natural oils and fats from the skin.

Carcinogenicity: No component known to be present in this product at >0.1% is

presently listed as a carcinogen by IARC, NTP or OSHA, unless otherwise noted in Section P - Other Information.

Routes of Exposure: Skin contact. Eye contact. Inhalation.

### D. First Aid Measures

Eye: In case of contact, flush eyes with plenty of water. Get medical attention if irritation persists.

Skin: Wash skin with soap and water. If irritation occurs, get medical

attention. Wash clothing before reuse.

Ingestion: Do not induce vomiting; get medical attention immediately.

Inhalation: If respiratory discomfort or irritation occurs, move the person to fresh air. See a doctor if discomfort or irritation continues.

#### E. Fire Fighting Measures

Flammable Properties

Flash Point (degrees F/C): >392°F / >200°C Method:COC

Upper Flammable Limit: NA Lower Flammable Limit: NA

Autoignition Temperature: Not determined

Hazardous Products of Combustion: Potential combustion products are oxides of carbon and asphyxiants.

Properties That Could Increase Fire or Explosion Hazard:Slightly combustible, when heated above flash point will release flammable vapors which can burn in open or be explosive in confined spaces if exposed to source of ignition.

CASTROL EP GREASE 2 MWD

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### E. Fire Fighting Measures (Cont.)

Extinguishing Media: Water fog, dry chemical, foam or CO2.

Fire Fighting Instructions: Treat as mineral oil fire. Wear self contained breathing apparatus when fire fighting in a confined space. Cool fire exposed containers with waterspray to prevent rupture.

### F. Accidental Release Measures

Recover free liquid. Keep product out of streams and waterways by diking or impounding. Advise authorities if product has entered or may enter sewers, watercourses or extensive land areas.

### G. Handling and Storage

Avoid contact with skin and eyes. Avoid breathing mists-in accordance with safety and industrial hygiene practices airborne exposures should be controlled to the lowest extent practicable. Do not take internally. Keep container closed when not in use. Bring product to room temperature before use. Do not store near heat, flame or strong oxidizing agents.

### H. Exposure Controls/Personal Protection

Personal Protective Equipment (PPE)

Eye/Face Protection: Safety glasses with side shield or chemical goggles. Skin Protection: Impervious gloves such as rubber should be used when handling this product.

Respiratory Protection: Good industrial hygiene practices recommend that engineering controls be used to reduce environmental concentrations to the threshold limit value (TLV) or permissible exposure limit (PEL), if applicable. If any associated TLV or PEL is exceeded, provide NIOSH approved respiratory protection.

Other: Eyewash facility. Boots, aprons, or chemical suits should be used when

necessary to prevent skin contact.

Exposure Guidelines: See information provided in Section B, Ingredients.

### I. Physical and Chemical Properties

pH at

Appearance/Odor:

Amber grease, odorless.

pH (conc): NA

Vapor Pressure (mm Hg): <0.01mm Hg @ 20 C

Vapor Density (Air = 1): Heavier than air

Boiling Point (degrees F/C): >572°F / >300°C

Freezing Point (degrees F/C): not determined

Melting Point (degrees F/C): 0.00 / 0.00 CELSIUS :NA

CASTROL EP GREASE 2 MWD MSDS ID: 13010A Page 4 of 6 Revised 1/26/01 Replaces 12/30/99 As of 3/25/03

## I. Physical and Chemical Properties (Cont.)

Solubility in Water: Negligible

Specific Gravity at 60 degrees F (H2O = 1): 0.9190 + /-

Density: Not calculated

Softening Point (degrees F): Not determined Evaporation Rate (n-Butyl Acetate = 1): < ether

Viscosity: Not available Bulk Density: Not determined

% Volatile: Nil

VOC: Not testedlbs/gallon Method: Not Tested Octanol/Water Partition Coefficient: Not determined

Saturated Vapor Concentration: Not determined

Molecular Weight: Not applicable

### J. Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Conditions To Avoid: None known.

Incompatibility With Other Materials: Strong oxidizing agents.

Hazardous Decomposition Products: Potential combustion products are oxides of carbon and asphyxiants.

### K. Toxicological Information

Eye Effects: May cause eye irritation.

Skin Effects, Contact: May cause skin irritation.

Skin Effects, Absorption: No acute effects expected.

Acute Oral Effects (Ingestion): Oral LD50 not established. Do not ingest. Acute Inhalation Effects: TLV for product not established. Refer to Hazardous

Materials List for ingredient TLV's. Chronic Effects: Prolonged or repeated contact with petroleum oil may remove

natural oils and fats from the skin.

Carcinogenicity: No component known to be present in this product at >0.1% is

presently listed as a carcinogen by IARC, NTP or OSHA, unless otherwise noted in Section P - Other Information.

### L. Ecological Information

Ecotoxicological Information: No specific ecological data available for this product.

### M. Disposal Considerations

### US EPA Hazardous Waste Numbers:

This material is regulated as used oil by the EPA. Under the Used Oil Management Standards (40 CFR 279) effective 3/8/93, EPA presumes used oil will be recycled. If it is, no characteristic determination is required provided all parties handling the used oil comply with part 279. These management standards apply to used oil until it is disposed of or sent for disposal. Individual state regulations may differ from the federal regulations. Refer to applicable state & local regulations for proper

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### M. Disposal Considerations (Cont.)

handling procedures

General Disposal Considerations:

Dispose of in accordance with local, state and federal regulations. Disposal of this material to the land may be banned by federal law (40 CFR 268).

CERCLA Reportable Quantity: This product does not contain any CERCLA regulated materials.

### N. Transport Information

Hazardous Materials Description/Proper Shipping Name:

Not Regulated.

Hazard Class: Same As Above

Identification Number (UN or NA Number): Same As Above

Packing Group: Same As Above

Freight Class:

NMFC 155250, PETROLEUM OILS, GREASES & RELATED PRODUCTS, NOI CLASS 65.

Telephone Number for Transport Instructions: 1-800-621-2661, SHEA Department

### O. Regulatory Information

U.S. Federal Regulations:

Hazardous per OSHA 29 CFR 1910.1200: YES

CERCLA/EPCRA:

Section 302 Extremely Hazardous Substances (EHS):
No listed ingredients are present on the 302 list.

Section 311/312 Hazard Class(es): Immediate: YES Delayed: NO Fire: NO Reactivity: NO Sudden Release of Pressure: NO

Section 313 Toxic Chemicals:

If none listed here or in Section B, there are no 313 chemicals present above threshold value.

Other U.S. Federal Regulations: This product is a mixture and is NOT listed in the TSCA inventory. The individual ingredients in the product ARE listed in the TSCA inventory.

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### P. Other Information

PETROLEUM OIL: STEL = 10 mg/M3. Using terminology of the International Agency for Research on Cancer (IARC), the petroleum distillates listed in Section B are classified by the supplier as severely processed. Not all of those listed in Section B may be present. The supplier has stated that these distillates do not require a carcinogen label as defined by OSHA 29 CFR 1910.1200. No component known to be present in this product at >0.1% is presently listed as a carcinogen by IARC, NTP or OSHA.

### Q. Disclaimer

Information presented herein has been compiled from information provided to us by our suppliers and other sources considered to be dependable, and is accurate and reliable to the best of our knowledge and belief, but is not guaranteed to be so. Nothing herein is to be construed as recommending any practice or the use of any product in violation of any patent, or in violation of any law or or regulation. It is the user's responsibility to determine the suitability of any material for a specific purpose, and to adopt such safety precautions as may be necessary. We make no warranty as to the results to be obtained in using any material and, since conditions of use are not under our control, must necessarily disclaim all liability with respect to the use of any material supplied by us.