

Material Safety Data Sheet

1. Chemical product and company identification

Product name Castrol Assuron 40

MSDS # 457090

Code 457090-US06

Product use Engine oils.

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

Manufacturer BP Lubricants USA Inc.

1500 Valley Road

Wayne, NJ 07470

Telephone: (973) 633-2200

Telecopier: (973) 633-7475

EMERGENCY HEALTH

INFORMATION:

1 (800) 447-8735

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

EMERGENCY SPILL

INFORMATION:

1 (800) 424-9300 CHEMTREC (USA)

OTHER PRODUCT

INFORMATION

1 (866) 4 BP - MSDS

(866-427-6737 Toll Free - North America)

email: bpcares@bp.com

2. Composition/information on ingredients

Ingredient name CAS # %

Base oil - highly refined 64741-88-4 60 - 65

Base oil - highly refined 64742-01-4 20 - 25

Base oil - highly refined 64742-65-0 1 - 5

Zinc alkyl dithiophosphate proprietary 1 - 5

phosphorodithioc acid, O,O - di- C1-14- alkyl esters zinc salts 68649-42-3 1 - 5

3. Hazards identification

Physical state Liquid.

Color Clear. Amber.

Emergency overview WARNING!

CAUSES EYE IRRITATION.

MAY CAUSE SKIN IRRITATION.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Keep container closed.

Use with adequate ventilation. Wash thoroughly after handling. Prolonged or repeated contact can

defat the skin and lead to irritation, cracking and/or dermatitis.

Routes of entry Skin Contact. Eye contact. Inhalation. Ingestion.

Potential health effects

Eyes Causes eye irritation.

Skin May cause skin irritation. Prolonged or repeated contact can defat the skin and lead to irritation

and/or dermatitis. Used engine oil may contain hazardous components which have the potential

to cause skin cancer.

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Inhalation May cause respiratory tract irritation.

Ingestion Ingestion may cause gastrointestinal irritation and diarrhea.

Medical conditions

aggravated by overexposure

None identified.

See toxicological Information (section 11).

4. First aid measures

Eye contact In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention immediately.

Skin contact Immediately wash exposed skin with soap and water. Remove contaminated clothing and shoes.

Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

Inhalation If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention if symptoms appear. If large quantities of this material are swallowed, call a physician immediately.

5. Fire-fighting measures

Flammability of the product May be combustible at high temperature.

Flash point 224 °C (Open cup) Cleveland.

Products of combustion These products are carbon oxides

sulfur oxides

phosphorus oxides

metal oxide/oxides

Hydrogen Sulfide (H₂S)

Unusual fire/explosion Non-explosive in the presence of the following materials or conditions: open flames, sparks and hazards static discharge, heat and shocks and mechanical impacts.

Fire-fighting media and instructions In case of fire, use water fog, foam, dry chemicals, or carbon dioxide. Do not use water jet.

Protective clothing (fire) Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental release measures

Personal precautions

Environmental
precautions and clean-up
methods

Personal protection in
case of a large spill

Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment (See Section: "Exposure controls/personal protection"). Follow all fire fighting procedures (See Section: "Fire-fighting measures").

If emergency personnel are unavailable, contain spilled material. For small spills add absorbent (soil may be used in the absence of other suitable materials) scoop up material and place in a sealed, liquid-proof container for disposal. For large spills dike spilled material or otherwise contain material to ensure runoff does not reach a waterway. Place spilled material in an appropriate container for disposal. Avoid contact of spilled material with soil and prevent runoff entering surface waterways. See Section 13 for Waste Disposal Information.

Chemical splash goggles. Chemical resistant protective suit. Boots. Chemical resistant gloves.

Vapor respirator or a self-contained breathing apparatus. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

CAUTION: The protection provided by air-purifying respirators is limited. Use a positive pressure air-supplied respirator if there is any potential for an uncontrolled release, if exposure levels are not known, or if concentrations exceed the protection limits of air-purifying respirator.

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7. Handling and storage

Handling Avoid contact with skin and clothing. Avoid prolonged or repeated contact with skin. Avoid contact

with eyes. Use only with adequate ventilation Avoid breathing vapor or mist. Wash thoroughly after handling.

Storage Keep container tightly closed. Keep container in a cool, well-ventilated area.

Empty containers

may contain harmful, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill,

weld, reuse or dispose of containers unless adequate precautions are taken against these hazards.

8. Exposure controls/personal protection

Occupational exposure

limits

Ingredient name Occupational exposure limits

Base oil - highly refined ACGIH (United States).

STEL: 10 mg/m³ 15 minute(s). Form: Oil mist, mineral

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

OSHA (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

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OSHA (United States).

TWA: 5 mg/m³ 8 hour(s). Form: Oil mist, mineral

Zinc alkyl dithiophosphate None assigned.

phosphorodithioc acid, O,O - di- C1-14- alkyl None assigned.

esters zinc salts

Some states may enforce more stringent exposure limits.

Control Measures Provide exhaust ventilation or other engineering controls to keep the relevant airborne

concentrations below their respective occupational exposure limits. Ensure that eyewash stations

and safety showers are close to the work-station location.

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.

Personal protection

Eyes Avoid contact with eyes. Chemical splash goggles.

Skin and body Avoid contact with skin and clothing. Wear suitable protective clothing.

Respiratory Use only with adequate ventilation Avoid breathing vapor or mist. In accordance with good industrial hygiene and safety work practices, airborne exposures should be controlled to the lowest extent practicable.

Hands Wear gloves that cannot be penetrated by chemicals or oil.

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.

Consult your supervisor or S.O.P. for special handling directions

Consult local authorities for acceptable exposure limits.

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9. Physical and chemical properties

Physical state Liquid.

Odor Oily

Color Clear. Amber.

Heat of combustion Not available.

Pour Point -20 °C

Specific gravity 0.8758

Solubility insoluble in water.

Viscosity Kinematic: 150.1 mm²/s (150.1 cSt) at 40°C

Kinematic: 14.83 mm²/s (14.83 cSt) at 100°C

10. Stability and reactivity

Stability and reactivity The product is stable.

Conditions to avoid Keep away from heat, sparks and flame.

Incompatibility with Reactive or incompatible with the following materials: oxidizing materials.

various substances

Hazardous decomposition carbon oxides (CO, CO₂) (carbon monoxide, carbon dioxide) , sulfur oxides (SO₂, SO₃...).

products phosphorus oxides, metal oxide/oxides, Hydrogen Sulfide (H₂S)

Hazardous polymerization Will not occur.

11. Toxicological information

Acute toxicity USED ENGINE OILS

Combustion products resulting from the operation of internal combustion engines contaminate

engine oils during use. Used engine oil may contain hazardous components which have the

potential to cause skin cancer. Frequent or prolonged contact with all types and makes of used

engine oil must therefore be avoided and a high standard of personal hygiene maintained.

Chronic toxicity

Carcinogenic No component of this product at levels greater than 0.1% is identified as a carcinogen by ACGIH

effects or the International Agency for Research on Cancer (IARC). No component of this product present

at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program

(NTP) or the U.S. Occupational Safety and Health Act (OSHA).

Mutagenic No component of this product at levels greater than 0.1% is classified by established regulatory

effects criteria as a mutagen.

Reproductive No component of this product at levels greater than or equal to 0.1% is classified by established effects regulatory criteria as a reproductive toxin.

Teratogenic No component of this product at levels greater than 0.1% is classified by established regulatory effects criteria as teratogenic or embryotoxic.

12. Ecological information

Ecotoxicity

No testing has been performed by the manufacturer.

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13. Disposal considerations

Waste information Avoid contact of spilled material and runoff with soil and surface waterways. Consult an environmental professional to determine if local, regional or national regulations would classify spilled or contaminated materials as hazardous waste. Use only approved transporters, recyclers, treatment, storage or disposal facilities. Dispose of in accordance with all applicable local and national regulations.

Consult your local or regional authorities.

14. Transport information

Not classified as hazardous for transport (DOT, TDG, IMO/IMDG, IATA/ICAO)

15. Regulatory information

U.S. Federal regulations United States inventory (TSCA 8b): All components are listed or exempted.

TSCA 12(b) one-time export notification:: nonane

TSCA 12(b) annual export notification: lead

This product is not regulated under Section 302 of SARA and 40 CFR Part 355.

SARA 311/312 MSDS distribution - chemical inventory - hazard identification:

CASTROL

ASSURON 40: Immediate (Acute) Health Hazard

SARA 313

Product name CAS number Concentration

Form R - Reporting phosphorodithioc acid, O,O - di- C1-14- alkyl esters zinc 68649-42-3

0.5195 - 1.0286

requirements salts

Supplier notification phosphorodithioc acid, O,O - di- C1-14- alkyl esters zinc 68649-42-

3 0.5195 - 1.0286

salts

CERCLA Sections 102a/103 Hazardous Substances (40 CFR Part 302.4):: Cadmium: 10 lbs.

(4.536 kg); Arsenic: 1 lbs. (0.4536 kg); Benzene: 10 lbs. (4.536 kg); lead: 10 lbs. (4.536 kg);

phosphorodithioc acid, O,O - di- C1-14- alkyl esters zinc salts ;

State regulations

Massachusetts Massachusetts RTK: None of the components are listed.
Substances

New Jersey New Jersey Hazardous Substances: The following components are listed:
Zinc alkyl
Hazardous dithiophosphate;phosphorodithioc acid, O,O - di- C1-14- alkyl esters zinc
salts
Substances

Pennsylvania RTK Pennsylvania RTK: The following components are listed: Zinc alkyl
Hazardous dithiophosphate;phosphorodithioc acid, O,O - di- C1-14- alkyl esters zinc
salts
Substances

WARNING: This product contains a chemical known to the State of California to cause
cancer.
Arsenic

WARNING: This product contains a chemical known to the State of California to cause
cancer and
birth defects or other reproductive harm.
Cadmium; Benzene; lead

Inventories Canada inventory: All components are listed or exempted.

Europe inventory: All components are listed or exempted.

Australian Inventory Status: All components are listed or exempted.

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

Japan inventory (ENCS): All components are listed or exempted.

Korea inventory (KECI): All components are listed or exempted.

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Philippines inventory (PICCS): All components are listed or exempted.

16. Other information

Label requirements WARNING!

CAUSES EYE IRRITATION.

MAY CAUSE SKIN IRRITATION.

MAY CAUSE RESPIRATORY TRACT IRRITATION.

HMIS® Rating : Health -1 National Fire 1 Fire hazard

Flammability 1 Protection

Physical 0 Association Health 1 0 Instability

Hazard (U.S.A.) Specific hazard

Personal X

protection

History

Date of issue 06/14/2007.

Date of previous issue 03/12/2007.

Prepared by Product Stewardship

Notice to reader

NOTICE : This Material Safety Data Sheet is based upon data considered to be accurate at the time of its preparation. Despite our efforts, it may not be up to date or applicable to the circumstances of any particular case. We are not responsible for any damage or injury resulting from abnormal use, from any failure to follow appropriate practices or from hazards inherent in the nature of the product.

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