SAFETY DATA SHEET

Echo Power Blend Two-Cycle Engine Oil



Section 1. Identification

GHS product identifier

: Echo Power Blend Two-Cycle Engine Oil

Synonyms

Code

Not available.625478416

Supplier's details

: CITGO Petroleum Corporation

P.O. Box 4689 Houston, TX 77210 sdsvend@citgo.com

Emergency telephone

number

: Technical Contact: (800) 248-4684 Medical Emergency: (832) 486-4700 CHEMTREC Emergency: (800) 424-9300

(United States Only)

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard

(29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 4

SKIN CORROSION/IRRITATION - Category 2

GHS label elements

Hazard pictograms



Signal word

: Warning

Hazard statements

Combustible liquid.
Causes skin irritation.

Precautionary statements

Prevention

: Wear protective gloves. Wear eye or face protection. Keep away from flames and hot

surfaces. - No smoking. Wash hands thoroughly after handling.

Response

: IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical

attention.

Storage

: Store in a well-ventilated place. Keep cool.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and

international regulations.

Hazards not otherwise

classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Not available.

CAS number/other identifiers

CAS number : Not applicable.

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Section 3. Composition/information on ingredients

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated light Polybutene	7 - 13 1 - 5	64742-47-8 9003-29-6

^{* =} Various ** = Mixture *** = Proprietary

Any concentration shown as a range is to protect confidentiality or is due to process variation.

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower

eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10

minutes. Get medical attention.

Inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If

not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar,

tie, belt or waistband.

Skin contact : Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing

before reuse. Clean shoes thoroughly before reuse.

Ingestion : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Do not induce vomiting unless

directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain

an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes skin irritation.

Ingestion : Irritating to mouth, throat and stomach.

Over-exposure signs/symptoms

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 redness

Ingestion : No specific data.

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

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

Specific treatments: Treat symptomatically and supportively.

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.

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Section 4. First aid measures

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Specific hazards arising from the chemical

: Combustible liquid. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. Runoff to sewer may create fire or explosion hazard.

Extinguishing media

Suitable extinguishing media

: Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media

: Do not use water jet.

Hazardous thermal decomposition products

: Decomposition products may include the following materials: carbon dioxide carbon monoxide

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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

 Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. 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. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. 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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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Section 7. Handling and storage

Precautions for safe handling

Protective measures

Put on appropriate personal protective equipment (see Section 8). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. 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. Workers should wash hands and face before eating, drinking and smoking. 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 a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. 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.

Bulk Storage Conditions: Maintain all storage tanks in accordance with applicable regulations. Use necessary controls to monitor tank inventories. Inspect all storage tanks on a periodic basis. Test tanks and associated piping for tightness. Maintain the automatic leak detection devices to assure proper working condition.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
" "	ACGIH TLV (United States, 4/2014). Absorbed through skin. TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours.

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, vapor controls, 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.

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Section 8. Exposure controls/personal protection

Eye/face protection

: Safety glasses equipped with side shields are recommended as minimum protection in industrial settings. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: Splash goggles. Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. chemical splash goggles. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection

: Chemical-resistant gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.

Body protection

: 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

: Use a properly fitted, air-purifying or supplied-air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Physical state : Liquid.

Color : Blue-green.

Odor : Petroleum.

pH : Not available.

Boiling point : Not available.

Flash point : Closed cup: 68°C (154.4°F) [Pensky-Martens (ASTM D-93)]

Open cup: 84°C (183.2°F) [Cleveland.]

Evaporation rate : <1 (n-butyl acetate. = 1)

Lower and upper explosive

(flammable) limits

: Not available.

Vapor pressure : <0.13 kPa (<1 mm Hg) [room temperature]

Vapor density : >1 [Air = 1] Relative density : 0.87

Density Ibs/gal : Estimated 7.25 lbs/gal
Gravity, °API : Estimated 31 @ 60 F

Solubility : Insoluble in the following materials: cold water.

Viscosity : Kinematic (40°C (104°F)): 0.77 cm²/s (77 cSt)

Section 10. Stability and reactivity

Reactivity: Not expected to be Explosive, Self-Reactive, Self-Heating, or an Organic Peroxide

under US GHS Definition(s).

Chemical stability: The product is stable.

Possibility of hazardous

reactions

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

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Section 10. Stability and reactivity

Conditions to avoid

: Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas.

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.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), hydrotreated light	LD50 Dermal	Rabbit	>2000 mg/kg	-
'	LD50 Oral	Rat	>5000 mg/kg	-

Conclusion/Summary

Distillates (petroleum), solvent-dewaxed heavy paraffinic: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. Distillates (petroleum), hydrotreated light: Mineral spirits have produced slight to moderate skin irritation particularly with evaporation from the skin is prevented. Animal studies have demonstrated that mineral spirits produced mild respiratory tract irritation at elevated concentrations. The most common effects observed in repeated dose animal studies with mineral spirits are kidney changes that are consistent with an alpha 2u-globulin- mediated process that is not regarded as relevant to humans. Certain studies have reported effects in the liver as well as hematological or urine chemistry changes. Abuse of similar materials has been associated with irregular heart rhythms and cardiac arrest. In certain repeated dose animal studies have changes were reported in behavior, neurochemistry and sensory evoked potentials which may be irreversible. Repeated exposure to elevated concentrations of hydrocarbon solvents can produce a variety of transient CNS effects (e.g., dizziness, headache, narcosis, etc). Distillates (petroleum), hydrotreated heavy paraffinic: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects. Distillates (petroleum), solvent-refined heavy paraffinic: Mineral oil mists derived from highly refined oils are reported to have low acute and sub-acute toxicities in animals. Effects from single and short-term repeated exposures to high concentrations of mineral oil mists well above applicable workplace exposure levels include lung inflammatory reaction, lipoid granuloma formation and lipoid pneumonia. In acute and sub-acute studies involving exposures to lower concentrations of mineral oil mists at or near current work place exposure levels produced no significant toxicological effects.

Irritation/Corrosion

Skin: No additional information.Eyes: No additional information.Respiratory: No additional information.

Sensitization

Skin: No additional information.

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Section 11. Toxicological information

Respiratory: No additional information.

Mutagenicity

Conclusion/Summary: No additional information.

Carcinogenicity

Conclusion/Summary: **Distillates (petroleum), solvent-refined heavy paraffinic**: In long term studies (up to

two years) no carcinogenic effects have been reported in any animal species tested.

Reproductive toxicity

Conclusion/Summary: No additional information.

Teratogenicity

Conclusion/Summary: No additional information.

Specific target organ toxicity (single exposure)

Name		Route of exposure	Target organs
Distillates (petroleum), hydrotreated light	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely

routes of exposure

: Routes of entry anticipated: Dermal, Inhalation.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes skin irritation.

Ingestion: Irritating to mouth, throat and stomach.

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 redness

Ingestion: No specific data.

Potential chronic health effects

General
 Carcinogenicity
 No known significant effects or critical hazards.
 Mutagenicity
 No known significant effects or critical hazards.
 Teratogenicity
 No known significant effects or critical hazards.
 Developmental effects
 No known significant effects or critical hazards.
 Fertility effects
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

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Section 11. Toxicological information

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated light	Acute LC50 2200 μg/l Fresh water	Fish - Lepomis macrochirus	4 days
	Acute LC50 2600 µg/l Fresh water Acute LC50 2900 µg/l Fresh water	Fish - Oncorhynchus mykiss Fish - Oncorhynchus mykiss	4 days 96 hours

Conclusion/Summary

: Not available.

Persistence and degradability

Conclusion/Summary: Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Polybutene	7.6 to 7.8	314 to 1882	high

Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimized wherever possible. 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. 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. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	UN 1268	UN 1268	Not available.	Not available.	UN 1268	UN 1268
UN proper shipping name	UN1268, Petroleum Distillates, n.o. s., Combustible Liquid, PG III [This product has a flash point	FLAMMABLE LIQUIDS, N.O. S. (Distillates (petroleum), hydrotreated light)	Not available.	Not available.	FLAMMABLE LIQUIDS, N.O. S. (Distillates (petroleum), hydrotreated light)	FLAMMABLE LIQUIDS, N.O. S. (Distillates (petroleum), hydrotreated light)

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Section 14. Transport information

	•					
	temperature between 60.5° to 93°C (141° and 200°F). Bulk shipments of this product are regulated.] (Distillates (petroleum), hydrotreated light)					
Transport hazard class(es)	Combustible liquid.	3	Not available.	Not available.	3	3
Packing group	Ш	III	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.	No.
Additional information	-	-	-	-	-	-

Special precautions for user : Transport within user's premises: always transport in closed containers that are

upright and secure. Ensure that persons transporting the product know what to do in the

event of an accident or spillage.

Transport in bulk according : Not available.

to Annex II of MARPOL 73/78 and the IBC Code

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Section 15. Regulatory information

U.S. Federal regulations

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

Clean Water Act (CWA) 307: Naphthalene; Ethylbenzene

Clean Water Act (CWA) 311: Naphthalene; Ethylbenzene; Xylene

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spills which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424-8802.

SARA 302/304

Composition/information on ingredients

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard

Immediate (acute) health hazard

Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), hydrotreated light	<20	Yes.	No.	No.	Yes.	No.
Polybutene	<5	No.	No.	No.	Yes.	No.

State regulations

Massachusetts : None of the components are listed.

New York : The following components are listed: Butene, homopolymer (products derived from

either/or But-1-ene/But-2-ene)

New Jersey: None of the components are listed.

Pennsylvania : The following components are listed: Butene, homopolymer (products derived from

either/or But-1-ene/But-2-ene)

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient name	%	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
Ethylbenzene	<0.01	Yes.	No.	41 μg/day (ingestion) 54 μg/day (inhalation)	No.
Naphthalene	<0.001	Yes.	No.	Yes.	No.

International regulations

International lists : Australia inventory (AICS): Not determined.

China inventory (IECSC): Not determined.

Japan inventory: Not determined. **Korea inventory**: Not determined.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined. Taiwan inventory (CSNN): Not determined.

EU Inventory : Not determined.

Canada

Canada inventory : All components are listed or exempted.

WHMIS (Canada) : Class B-3: Combustible liquid with a flash point between 37.8°C (100°F) and 93.3°C

(200°F).

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Section 15. Regulatory information

Canadian NPRI : The following components are listed: Hydrotreated light distillate

CEPA Toxic substances: None of the components are listed.

Section 16. Other information

National Fire Protection Association (U.S.A.)



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History

Date of issue/Date of

revision

: 12/29/2014.

Key to abbreviations

: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

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 73/78 = International Convention for the Prevention of Pollution From Ships,

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

UN = United Nations

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