SYNTHETIC PC MOTOR OIL, ALL SAE GRADES

Material Safety Data Sheet

Conforms to ANSI Z400.1-2004 Standard - United States, Canada

Revision date : 07/30/2012 **Version** : 1

1. Product and company identification

Product name : SYNTHETIC PC MOTOR OIL, ALL SAE GRADES

Commercial name(s). : Not available.

Material uses : A multi-viscosity full synthetic motor oil for use in passenger car gasoline engines.

Supplier/Manufacturer : Eni USA R&M Co. Inc.
539 Marwood Road
Cabot, PA 16023
Ph: (724) 352-4451
Fax: (724) 352-9543
www.eniusarm.com

In Canada : Eni USA R&M Co. Inc.
1355 Graham Bell,
Boucherville, QUEBEC J4B 6A1
www.eniusarm.com

MSDS authored by : KMK Regulatory Services Inc.

In case of emergency : 1-800-922-9243; 8am - 5pm EST (M-F)
CHEMTREC, U.S. : 1-800-424-9300 International: +1-703-527-3887 24/7

2. Hazards identification

Emergency overview

Physical state : Liquid. [Viscous.]

Color : Light amber to amber.

Odor : Petroleum Hydrocarbon

Signal word : WARNING!

Hazard statements : CAUSES EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Precautionary measures : Do not breathe vapor or mist. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Routes of entry : Not available.

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin : Irritating to skin.

Eyes : Irritating to eyes.

Potential chronic health effects

Chronic effects : Contains material that may cause target organ damage, based on animal data.

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.

2. Hazards identification

Target organs : Contains material which may cause damage to the following organs: upper respiratory tract, skin, eyes.

Over-exposure signs/symptoms

Inhalation : No known significant effects or critical hazards.

Ingestion : No known significant effects or critical hazards.

Skin : Adverse symptoms may include the following:
irritation
redness

Eyes : Adverse symptoms may include the following:
pain or irritation
watering
redness

Medical conditions aggravated by overexposure : Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

3. Composition/information on ingredients

United States

Name	CAS number	%
Distillates (petroleum), hydrotreated heavy paraffinic Distillates (petroleum), solvent-dewaxed heavy paraffinic Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	64742-54-7 64742-65-0 68649-42-3	60 - 100 5 - 10 1 - 5

Canada

Name	CAS number	%
Distillates (petroleum), hydrotreated heavy paraffinic Distillates (petroleum), solvent-dewaxed heavy paraffinic Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	64742-54-7 64742-65-0 68649-42-3	60 - 100 5 - 10 1 - 5

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.

4. First aid measures

Eye contact : Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 20 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.

Skin contact : In case of contact, immediately flush skin with plenty of water for at least 20 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.

Inhalation : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

Ingestion : Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

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.

Notes to physician : No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

5. Fire-fighting measures

Flammability of the product : May be combustible at high temperature.

Extinguishing media

Suitable : Use an extinguishing agent suitable for the surrounding fire.

Not suitable : None known.

Special exposure hazards : No special precaution is required.

Hazardous thermal decomposition products : No specific data.

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.

6. Accidental release measures

Personal precautions : 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. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

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 for cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. 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 via a licensed waste disposal contractor.

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. 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 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.

7. Handling and storage

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

Storage : 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. 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.

8. Exposure controls/personal protection

United States

Ingredient	Exposure limits
Distillates (petroleum), hydrotreated heavy paraffinic	**ACGIH TLV (United States, 2/2010).** TWA: 5 mg/m³ 8 hour(s). Form: Inhalable fraction. **NIOSH REL (United States, 6/2009).** TWA: 5 mg/m³ 10 hour(s). Form: Mist STEL: 10 mg/m³ 15 minute(s). Form: Mist **OSHA PEL (United States, 6/2010).** TWA: 5 mg/m³ 8 hour(s).
Distillates (petroleum), solvent-dewaxed heavy paraffinic	**ACGIH TLV (United States, 2/2010).** TWA: 5 mg/m³ 8 hour(s). Form: Inhalable fraction. **NIOSH REL (United States, 6/2009).** STEL: 10 mg/m³ 15 minute(s). Form: Mist TWA: 5 mg/m³ 10 hour(s). Form: Mist **OSHA PEL (United States, 6/2010).** TWA: 5 mg/m³ 8 hour(s). Form: Mist

Canada

Occupational exposure limits		TWA (8 hours)			STEL (15 mins)			Ceiling			
Ingredient	**List name**	**ppm**	**mg/m³**	**Other**	**ppm**	**mg/m³**	**Other**	**ppm**	**mg/m³**	**Other**	**Notations**
Distillates (petroleum), hydrotreated heavy paraffinic	US ACGIH 2/2010	-	5	-	-	-	-	-	-	-	[a]
	ON 7/2010	-	5	-	-	10	-	-	-	-	[b]
	QC 6/2008	-	5	-	-	10	-	-	-	-	[b]
Distillates (petroleum), solvent-dewaxed heavy paraffinic	US ACGIH 2/2010	-	5	-	-	-	-	-	-	-	[a]
	AB 4/2009	-	5	-	-	10	-	-	-	-	[b]
	ON 7/2010	-	5	-	-	10	-	-	-	-	[b]
	QC 6/2008	-	5	-	-	10	-	-	-	-	[b]

Form: [a]Inhalable fraction. [b]Mist

Consult local authorities for acceptable exposure limits.

Recommended monitoring procedures : If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

Engineering measures : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

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.

Personal protection

Respiratory : 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.

Hands : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

Eyes : 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 or dusts.

Skin : 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.

8. Exposure controls/personal protection

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, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Physical state : Liquid. [Viscous.]

Flash point : Open cup: >=184°C (>=363.2°F) [Cleveland.]

Color : Light amber to amber.

Odor : Petroleum Hydrocarbon

Melting/Pour point : -32 to -25°C (-25.6 to -13°F)

Relative density : 0.84 to 0.89 [at 15°C]

Viscosity : Kinematic (100°C (212°F)): 0.056 to 0.219 cm^2/s (5.6 to 21.9 cSt)

Solubility : Negligible solubility in water.

10. Stability and reactivity

Chemical stability : The product is stable.

Conditions to avoid : No specific data.

Incompatible materials : No specific data.

Hazardous decomposition products : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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

11. Toxicological information

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Distillates (petroleum), solvent-dewaxed heavy paraffinic	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

Chronic toxicity

There is no data available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	Eyes - Irritant	Rabbit	-	-	-

Sensitizer

Skin : There is no data available.

Respiratory : There is no data available.

Carcinogenicity

There is no data available.

Classification

Product/ingredient name	ACGIH	IARC	EPA	NIOSH	NTP	OSHA
Distillates (petroleum), hydrotreated heavy paraffinic	A4	-	-	-	-	-
Distillates (petroleum), solvent-dewaxed heavy paraffinic	A4	-	-	-	-	-

Mutagenicity

11. Toxicological information

There is no data available.

Teratogenicity

There is no data available.

Reproductive toxicity

There is no data available.

12. Ecological information

Ecotoxicity : No known significant effects or critical hazards.

Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	Acute EC50 1 to 5 mg/l Acute EC50 1 to 1.5 mg/l Chronic LC50 1 to 5 mg/l	Algae Crustaceans Fish	96 hours 48 hours 96 hours

Persistence/degradability

There is no data available.

13. Disposal considerations

Waste disposal : 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 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 empty 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.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	Not regulated.	-	-	-		-
TDG Classification	Not regulated.	-	-	-		-
IMDG Class	Not regulated.	-	-	-		-
IATA-DGR Class	Not regulated.	-	-	-		-

PG* : Packing group Exemption to the above classification may apply. **AERG** : Not available.

15. Regulatory information

United States

HCS Classification : Irritating material
Target organ effects

U.S. Federal regulations : **TSCA 8(a) PAIR**: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts; Diphenylamine

TSCA 8(a) IUR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): Not determined.

SARA 302/304/311/312 extremely hazardous substances: No products were found.
SARA 302/304 emergency planning and notification: No products were found.
SARA 302/304/311/312 hazardous chemicals: No products were found.
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.

Clean Water Act (CWA) 307: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs) : Not listed

Clean Air Act Section 602 Class I Substances : Not listed

Clean Air Act Section 602 Class II Substances : Not listed

DEA List I Chemicals (Precursor Chemicals) : Not listed

DEA List II Chemicals (Essential Chemicals) : Not listed

SARA 313

	Product name	CAS number	Concentration
Form R - Reporting requirements	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	1 - 5
Supplier notification	Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts	68649-42-3	1 - 5

SARA 313 notifications must not be detached from the MSDS and any copying and redistribution of the MSDS shall include copying and redistribution of the notice attached to copies of the MSDS subsequently redistributed.

State regulations

Massachusetts : None of the components are listed.

New York : None of the components are listed.

New Jersey : The following components are listed: Distillates (petroleum), hydrotreated heavy paraffinic; Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts; Distillates (petroleum), solvent-dewaxed heavy paraffinic

Pennsylvania : The following components are listed: Phosphorodithioic acid, O,O-di-C1-14-alkyl esters, zinc salts

California Prop. 65

No products were found.

Canada

WHMIS (Canada) : Class D-2B: Material causing other toxic effects (Toxic).

Canadian lists

Canadian NPRI : The following components are listed: Zinc

15. Regulatory information

CEPA Toxic substances : None of the components are listed.

Canada inventory : Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

16. Other information

Label requirements : CAUSES EYE AND SKIN IRRITATION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

Hazardous Material Information System (U.S.A.) : **Health :** 2 * **Flammability :** 1 **Physical hazards :** 0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

National Fire Protection Association (U.S.A.) : **Health :** 2 **Flammability :** 1 **Instability :** 0

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History

Date of issue mm/dd/yyyy : 07/30/2012

Version : 1

Revised Section(s) : Not applicable.

Notice to reader

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Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.