



# SAFETY DATA SHEET

Issue Date No Data Available

Revision Date 07-21-2017

Version 1

## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

### Product identifier

**Product Name:** ADVANCED ENGINE TREATMENT

### Other means of identification

**Common Name:** 0657  
**UN/ID No** Not Regulated  
**Synonyms** None  
**Product Categories** Additive, Lubricant, Automotive

### Recommended use of the chemical and restrictions on use

**Sale and Use Restrictions** Not applicable  
**Recommended Use** Restricted to professional users.  
**Uses advised against** Consumer use

### Details of the supplier of the safety data sheet

**Supplier Address**  
MOC PRODUCTS CO., INC.  
12306 Montague Street  
Pacoima, CA 91331

### Emergency telephone number

**Company Phone Number** MOC PRODUCTS CO., INC. (818) 794-3500  
**Emergency Telephone** CHEMTREC 1-800-424-9300

## 2. HAZARDS IDENTIFICATION

### Classification

Skin sensitization	Category 1
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### Label elements

#### Emergency Overview

<b>Warning</b>		
<b>Hazard statements</b> May cause an allergic skin reaction		
<b>Appearance</b> Oil	<b>Physical state</b> Liquid	<b>Odor</b> Petroleum

### Precautionary Statements - Prevention

Avoid breathing dust/fume/gas/mist/vapors/spray  
Contaminated work clothing should not be allowed out of the workplace  
Wear protective gloves

**Precautionary Statements - Response**

Specific treatment (see response statements below and Section 4 of the Safety Data Sheet)

IF ON SKIN: Wash with plenty of soap and water  
 If skin irritation or rash occurs: Get medical advice/attention  
 Wash contaminated clothing before reuse

**Precautionary Statements - Disposal**

Dispose of contents/container to an approved waste disposal plant

**Hazards not otherwise classified (HNOC)**

**Other information**

- Toxic to aquatic life with long lasting effects
  - Harmful to aquatic life
- 84.48 % of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

<b>Components</b>	<b>CAS Number</b>	<b>Weight %</b>	<b>Trade Secret</b>
1-Decene, Homopolymer, Hydrogenated	68037-01-4	60-75	*
Hydrotreated Heavy Paraffinic Oil	64742-54-7	10-15	*
Highly Refined Mineral Oil (C15-C50)	MIXTURE	5-10	*
Benzenamine, N-Phenyl-,Reaction Products With 2,4,4-Trimethylpentene	68411-46-1	2-5	*
Alkyl diphenylamine	184378-08-3	2-5	*
Mineral Oil	64742-58-1	0-4	*
Aliphatic Petroleum Distillates	64742-65-0	0-4	*
Phenol, 2,6-bis(1,1,-dimethylethyl)-	128-39-2	1-2	*
Ethylene-Propylene Copolymer	PROPRIETARY	0.2-0.6	*

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

**4. FIRST AID MEASURES**

**First aid measures**

- Skin contact** Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Remove and wash contaminated clothing separately before reuse.
- Inhalation** Remove to fresh air. Keep at rest position comfortable for breathing. Get medical attention if symptoms occur.
- Eye contact** Immediately flush eyes for at least 15 minutes. Get medical attention.
- Ingestion** If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Call a physician or Poison Control Center immediately.
- Notes to Physician** Acute aspirations of large amounts of oil-laden material may produce a serious aspiration pneumonia. Patients who aspirate these oils should be followed for the development of long-term sequelae. Inhalation of oil mists below current workplace exposure limits is unlikely to cause pulmonary abnormalities.

**Most important symptoms and effects, both acute and delayed**

- Symptoms** Drowsiness, Dizziness, Coughing and/ or wheezing; Difficulty in breathing; Eye irritation. Skin irritation: May cause allergic skin reaction.

**Indication of any immediate medical attention and special treatment needed**

**Self-protection of the first aider** Avoid contact with skin. See Section 8 for information on appropriate personal protective equipment.

**5. FIRE-FIGHTING MEASURES**

**Suitable extinguishing media:**

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

**Small Fire** Dry chemical or CO2.

**Large Fire** Water spray or fog; Foam.

**Explosive properties:** Risk of explosion if heated under confinement: Fire or intense heat may cause violent rupture of packages.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors. Product is or contains a sensitizer: May cause sensitization by skin contact.

**Hazardous combustion products** Aldehydes, Hydrocarbons, Carbon monoxide, Carbon dioxide (CO2), Oxides of sulfur, Nitrogen oxides (NOx), Metal oxides, Phosphorus oxides, Alkyl Mercaptans, Hydrogen sulfide.

**Specific methods:**

**Sensitivity to Mechanical Impact** None.

**Sensitivity to Static Discharge** May be ignited by heat, sparks or flames.

**Special firefighting procedures:**

No action shall be taken involving any personal risk without suitable training. Evacuate surrounding areas. Dike to collect large liquid spills. As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Do not use water jet. Do not use a solid water stream as it may scatter and spread fire. The product is insoluble and floats on water. Use water spray to keep fire-exposed containers cool. Water may cause frothing of heated materials. Avoid spreading burning liquid with water used for cooling purposes. Water mist may be used to cool closed containers. Do not allow run-off from fire-fighting to enter drains or water courses.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions, protective equipment and emergency procedures**

**Personal precautions:** Use personal protective equipment. See Section 8 for information on appropriate personal protective equipment. Evacuate personnel to safe areas. Avoid contact with skin, eyes and clothing.

**For emergency responders** Use personal protection recommended in Section 8.

**Environmental precautions**

**Environmental precautions:** Avoid subsoil penetration. Do not flush into surface water or sanitary sewer system. Water runoff can cause environmental damage. Local authorities should be advised if significant spillages cannot be contained.

**Methods and material for containment and cleaning up**

**Methods for Containment** Dike far ahead of spill; use dry sand to contain the flow of material. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to state, local, federal regulations.

**Methods for clean-up:** Clean-up methods - small spillage. Contain and collect spillage with non-combustible

absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to state, local, federal regulations. Clean-up methods - large spillage. Keep unnecessary personnel away. 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.

**Prevention of secondary hazards** Clean contaminated objects and areas thoroughly observing environmental regulations.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Handling:** Protect from physical damage. Do not store at temperatures above 120°F (50°). Empty containers retain product residue and can be hazardous.

### Conditions for safe storage, including any incompatibilities

**Technical measures/precautions:** Mechanical ventilation required if used indoors on a continuous basis. Eye wash and safety shower should be easily accessible.

**Materials to avoid:** Strong acids. Strong reducing agents Strong oxidizing agents: Chlorates, Nitrates, Peroxides.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **Exposure Guidelines**

Components	ACGIH TLV	OSHA Exposure Limits:	NIOSH IDLH
1-Decene, Homopolymer, Hydrogenated 68037-01-4	5 mg/m <sup>3</sup> TLV (inhalable fraction)	5 mg/m <sup>3</sup>	-
Hydrotreated Heavy Paraffinic Oil 64742-54-7	5 mg/m <sup>3</sup> TWA (mist) 10 mg/m <sup>3</sup> STEL (mist)	5 mg/m <sup>3</sup>	-
Highly Refined Mineral Oil (C15-C50) MIXTURE	-	Not established	-
Benzenamine, N-Phenyl-, Reaction Products With 2,4,4-Trimethylpentene 68411-46-1	STEL: No data TWA: 10 mg/m <sup>3</sup>	Not established	-
Alkyl diphenylamine 184378-08-3	-	Not established	-
Mineral Oil 64742-58-1	5 mg/m <sup>3</sup> (mist)	5 mg/m <sup>3</sup> (mist)	-
Aliphatic Petroleum Distillates 64742-65-0	-	Not established	-
Phenol, 2,6-bis(1,1,-dimethylethyl)- 128-39-2	-	Not established	-
Ethylene-Propylene Copolymer PROPRIETARY	-	Not established	-

#### **Appropriate engineering controls**

**Engineering measures:** Ensure adequate ventilation, especially in confined areas. Eye wash and safety shower should be easily accessible.

#### **Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear normal work clothing, Chemical resistant gloves (consult with the specific manufacturer to confirm performance).

**Respiratory protection** Ensure adequate ventilation. No protective equipment is needed under normal use

conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. A respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 and ANSI Z88.2 should be followed whenever workplace conditions warrant a respirator's use. Emergency response/release cleanup may require additional respiratory protection, including SCBAs.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. When using do not eat, drink or smoke. Avoid contact with eyes, skin and clothing. Avoid breathing vapors or mists. Wear suitable gloves and eye/face protection. Wash face, hands and any exposed skin thoroughly after handling. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

**Information on basic physical and chemical properties**

<b>Physical state</b>	Liquid	<b>Odor</b>	Petroleum
<b>Appearance</b>	Oil	<b>Odor threshold</b>	No information available
<b>Color</b>	Green, Brown		
<b>Property</b>	<b>Values</b>	<b>Remarks • Method</b>	
<b>pH</b>	N/A	Not applicable	
<b>Melting point/freezing point</b>	No information available . / .		
<b>Boiling point / boiling range</b>	>= 414 °C / 777 °F	(based on components)	
<b>Flash point</b>	>= 150 °C / 302 °F	(based on components)	
<b>Evaporation rate</b>	No Data Available	No Data Available	
<b>Flammability (solid, gas)</b>	No information available		
<b>Flammability Limits in Air</b>			
<b>Upper flammability limit</b>	No Data Available		
<b>Lower flammability limit</b>	No Data Available		
<b>Vapor pressure</b>	No Data Available		
<b>Vapor density</b>	Heavier than air	Heavier than air	
<b>Specific Gravity</b>	0.84		
<b>Water solubility</b>	Insoluble in water		
<b>Solubility in other solvents</b>	No Data Available		
<b>Partition coefficient</b>	No Data Available		
<b>Autoignition temperature</b>	No Data Available		
<b>Decomposition temperature</b>	No Data Available		
<b>Kinematic viscosity</b>	>= 31 mm <sup>2</sup> /s	@ 40 °C	
<b>Dynamic viscosity</b>	No Data Available		
<b>Explosive properties</b>	No Data Available		
<b>Oxidizing properties</b>	No Data Available		

**Other information**

<b>Softening point</b>	No Data Available
<b>Molecular weight</b>	No Data Available
<b>VOC Content (%)</b>	
<b>VOC Content (%)</b>	None
<b>Density</b>	0.84 g/cc
<b>Bulk density</b>	No Data Available

**10. STABILITY AND REACTIVITY**

**Reactivity**  
Reactivity Stable.

**Chemical stability**  
**Possibility of Hazardous Reactions** None under normal processing.

**Hazardous polymerization** Hazardous polymerization does not occur.

**Conditions to avoid**  
Heat, flames and sparks.

**Incompatible materials**

**Materials to avoid:** Strong acids. Strong reducing agents Strong oxidizing agents: Chlorates, Nitrates, Peroxides.

**Hazardous Decomposition Products**

**Hazardous Decomposition Products** Aldehydes, Hydrocarbons, Carbon monoxide, Carbon dioxide (CO<sub>2</sub>), Sulfur oxides (SO<sub>x</sub>), Nitrogen oxides (NO<sub>x</sub>), Metal oxides, Phosphorus oxides, Alkyl Mercaptans, Hydrogen sulfide.

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

<b>Product Information</b>	May cause allergic skin reaction.
<b>Inhalation</b>	Not expected to be harmful if inhaled. Contains a petroleum-based mineral oil. May cause respiratory irritation or other pulmonary effects following prolonged or repeated inhalation of oil mist at airborne levels above the recommended mineral oil mist exposure limit. Symptoms of respiratory irritation may include coughing and difficulty breathing.
<b>Eye contact</b>	Contact with eyes may cause irritation.
<b>Skin Contact</b>	May cause irritation. May cause allergic skin reaction. Repeated exposure may cause skin dryness or cracking.
<b>Ingestion</b>	Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Potential for aspiration if swallowed.

Components	Oral LD50	Dermal LD50	Inhalation LC50
1-Decene, Homopolymer, Hydrogenated 68037-01-4	= 5000 mg/kg ( Rat )	>2000 mg/kg ( Rabbit )	-
Hydrotreated Heavy Paraffinic Oil 64742-54-7	>5000mg/kg (Rat)	>5000 mg/kg (Rabbit)	-
Highly Refined Mineral Oil (C15-C50) MIXTURE	-	-	-
Benzenamine, N-Phenyl-,Reaction Products With 2,4,4-Trimethylpentene 68411-46-1	>2000 mg/kg (Rat)	>2000 mg/kg (Rat)	2170 mg/m <sup>3</sup> (rat) 4hr
Alkyl diphenylamine 184378-08-3	>5000 mg/kg(Rat)	>2000 mg/kg (Rabbit)	-
Mineral Oil 64742-58-1	> 2000 mg/kg ( Rat )	> 4480 mg/kg ( Rabbit )	-
Aliphatic Petroleum Distillates 64742-65-0	-	-	-
Phenol, 2,6-bis(1,1,-dimethylethyl)- 128-39-2	> 5000 mg/kg ( Rat )	> 10 g/kg (Rabbit)	-
Ethylene-Propylene Copolymer PROPRIETARY	-	-	-

### Information on toxicological effects

#### Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Sensitization</b>	Skin Sensitization: May cause allergic skin reaction. Respiratory Sensitization: Not classified.
<b>Mutagenic effects:</b>	No data available to indicate product or any components present at or greater than 0.1%

<b>Carcinogenicity</b>	are mutagenic or genotoxic. No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by IARC, NTP, or OSHA.
<b>Reproductive toxicity</b>	No data to indicate either product or components present at or greater than 0.1% may cause reproductive harm.
<b>STOT - single exposure</b>	Not classified.
<b>STOT - repeated exposure</b>	Not classified.
<b>Chronic toxicity</b>	Prolonged skin contact may defat the skin and produce dermatitis.
<b>Subchronic toxicity</b>	No information available.
<b>Target Organ Effects</b>	Skin, Eyes, Respiratory system.
<b>Neurological effects</b>	No information available.
<b>Other adverse effects</b>	(CAS#68411-46-1) Benzeneamine, N-Phenyl, reaction products with 2,4,4 trimethylpentene. Adaptive effects were observed after repeated exposure in animal studies. May cause blood effects. May cause damage to liver after repeated high doses, as shown in animal studies.
<b>Aspiration hazard</b>	Risk of serious damage to the lungs (by aspiration).

**Numerical measures of toxicity - Product Information**

<b>Unknown Acute Toxicity</b>	84.48 % of the mixture consists of ingredient(s) of unknown toxicity
<b>The following values are calculated based on chapter 3.1 of the GHS document .</b>	
<b>ATEmix (oral)</b>	7214 mg/kg
<b>ATEmix (dermal)</b>	25726 mg/kg

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

Acute Aquatic Toxicity: Harmful to aquatic life. Chronic Aquatic Toxicity: Toxic to aquatic life with long lasting effects.

85.14 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Components	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
1-Decene, Homopolymer, Hydrogenated 68037-01-4	1000:72h Scenedesmus capricornutum mg/l NOELR OECD Test Guideline 201	> 1000 : 96h Salmo gairdneri mg/l LC50: >750: 96h Pimephales promelas mg/l LC50		190:48h Daphnia magna mg/l EC50
Hydrotreated Heavy Paraffinic Oil 64742-54-7		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50
Benzenamine, N-Phenyl-,Reaction Products With 2,4,4-Trimethylpentene 68411-46-1	>100 -72 h mg/L Desmodesmus subspicarius EC50	>71 96h mg/L Brachydanio rerio LC50		=51 48h mg/L EC50 Daphnia magna
Mineral Oil 64742-58-1		79.6: 96 h Brachydanio rerio mg/L LC50 semi-static 3.2: 96 h Pimephales promelas mg/L LC50 semi-static		
Aliphatic Petroleum Distillates 64742-65-0		5000: 96 h Oncorhynchus mykiss mg/L LC50		1000: 48 h Daphnia magna mg/L EC50
Phenol, 2,6-bis(1,1,-dimethylethyl)- 128-39-2	Not tested	>=1.4 mg/l LC50 (96 h)	>= 1000 mg/l EC50 (3h) activated sludge	0.45: 48 h Daphnia magna mg/L EC50

**Persistence and degradability**

Readily biodegradable: Not expected.

**Bioaccumulation**

Bioaccumulative potential.

**Mobility**

The product is insoluble and floats on water.

Components	Partition coefficient
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Phenol, 2,6-bis(1,1,-dimethylethyl)- 128-39-2	4.5
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**13. DISPOSAL CONSIDERATIONS**

Waste treatment methods

- Disposal of wastes** Dispose of in accordance with federal, state and local regulations.
- Contaminated packaging** Do not reuse container. Dispose of in accordance with federal, state and local regulations.

**14. TRANSPORT INFORMATION**

- DOT Not regulated
- IATA Not regulated
- IMDG Not regulated

**15. REGULATORY INFORMATION**

International Inventories

- Legend:  
*TSCA - United States Toxic Substances Control Act Section 8(b) Inventory*  
*DSL/NDL - Canadian Domestic Substances List/Non-Domestic Substances List*

Federal Regulations

**SARA 313**  
No SARA 313 chemicals are present above the reporting threshold: Zinc Compounds >= 0.1%.

SARA 311/312 Hazard Categories

- |                                   |     |
|-----------------------------------|-----|
| Acute health hazard               | Yes |
| Chronic Health Hazard             | Yes |
| Fire hazard                       | No  |
| Sudden release of pressure hazard | No  |
| Reactive Hazard                   | No  |

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.



**State Regulations (RTK)**

**California Proposition 65**

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm:

Components	California Proposition 65
Ethylene Glycol - 107-21-1	Developmental

**U.S. State Right-to-Know Regulations**

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION**

**NFPA Rating**

Health hazards 1

Flammability 1

Instability 0

Physical and Chemical Properties -

**HMIS Rating**

Health hazards 2\*

Flammability 1

Physical hazards 0

Personal protection B

*Chronic Hazard Star Legend*

\* = Chronic Health Hazard

Prepared by

Environmental Health and Safety Department

Revision Date

07-21-2017

Revision Note

**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**