

## Material Safety Data Sheet

Prepared according to 29 CFR 1910.1200

### 1. Chemical Product and Company Identification

American Refining Group, Inc.  
77 North Kendall Avenue  
Bradford, PA 16701 USA  
Tel: (814) 368.1200  
www.amref.com



|                                           |                                                                             |
|-------------------------------------------|-----------------------------------------------------------------------------|
| <b>Product Name</b>                       | Brad Penn® Penn-Grade 1 ® Partial Synthetic High Performance Oil SAE 20W-50 |
| <b>Product Code</b>                       | BP7119                                                                      |
| <b>CAS Number</b>                         | Not applicable for mixtures                                                 |
| <b>Synonyms</b>                           | High Performance Engine Oil                                                 |
| <b>Generic Chemical Name</b>              | Hydrotreated Heavy Paraffinic Distillate                                    |
| <b>Product Type</b>                       | Mixture                                                                     |
| <b>Transportation Emergency Phone No.</b> | Chemtrec: 1-800-424-9300 (24 HRS)                                           |
| <b>ARG Emergency Phone No.</b>            | 814-368-1297 (24 HRS)                                                       |
| <b>MSDS E-Mail</b>                        | msds@amref.com                                                              |

### 2. Hazards Identification

|                                                  |                                                                                                                                                                                                                                |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appearance</b>                                | Green liquid                                                                                                                                                                                                                   |
| <b>Odor</b>                                      | Hydrocarbon oil                                                                                                                                                                                                                |
| <b>Signal Word</b>                               | WARNING!<br>Harmful if inhaled<br>Harmful if absorbed through skin.<br>May cause internal organ effects based on chronic studies with laboratory animals<br>May cause eye irritation<br>May cause respiratory tract irritation |
| <b>OSHA Regulatory Status</b>                    | This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)                                                                                                                             |
| <b>Precautions</b>                               |                                                                                                                                                                                                                                |
| <b>Inhalation</b>                                | Avoid breathing dust/fume/gas/mist/vapors/spray. Keep container tightly closed. Use only with adequate ventilation.                                                                                                            |
| <b>Eyes</b>                                      | Avoid contact with eyes. Wash thoroughly after handling.                                                                                                                                                                       |
| <b>Skin</b>                                      | Avoid contact with skin and clothing. Wash thoroughly after handling.                                                                                                                                                          |
| <b>Medical Conditions Aggravated by Exposure</b> | Pre-existing disorders involving any target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product                                                                                  |
| <b>Chronic Effects</b>                           | See Section 11 for complete health hazard information                                                                                                                                                                          |
| <b>Environmental Effects</b>                     | See Section 12 for complete ecological information                                                                                                                                                                             |

### 3. Composition / Information on Ingredients

| CAS No.      | Component                                  | Percent |
|--------------|--------------------------------------------|---------|
| 64742-54-7   | Hydrotreated heavy paraffinic distillate   | 45-55   |
| 64742-01-4   | Residual oils (petroleum), solvent refined | 15-25   |
| confidential | Zinc alkyldithiophosphate                  | 0.1-1.1 |
| 74499-35-7   | p-dodecylphenol                            | .01-.10 |

#### Component Regulatory Information

This product may be regulated, have exposure limits or other information identified as the following: Mineral Oil (See Section 8)

### 4. First Aid Measures

|                           |                                                                                                                                                                                                                                                                                  |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eyes</b>               | Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.                                                                               |
| <b>Skin</b>               | In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.                                      |
| <b>Inhalation</b>         | 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. |
| <b>Ingestion</b>          | DO NOT INDUCE VOMITING. If conscious, rinse out mouth with water. Get medical attention immediately.                                                                                                                                                                             |
| <b>Note to Physicians</b> | No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.                                                                                                                                 |

### 5. Fire Fighting Measures

#### Flammable Properties

Not available

#### Extinguishing Media

Use dry chemical, CO<sub>2</sub>, water spray (FOG) or foam

#### Specific Hazards Arising from Chemical

Elevated temperatures can lead to the formation of irritating fumes and vapors. Decomposition products may include the following materials: Carbon dioxide and Carbon monoxide.

#### Protective Equipment and Precautions for Firefighters

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

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### 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. 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.

### 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.

### Methods for Containment

Stop leak if without risk.

### Methods for Cleanup

Move containers from spill area. Approach release from upwind. Absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

## 7. Handling and Storage

### Handling Procedures

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 get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Use only with adequate ventilation. Use non-sparking tools.

### Shipping and Storing Procedures

Store in accordance with local regulations. Store in a segregated and approved area. Keep in the original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials. Do not store in unlabeled containers. Store and use away from heat, sparks, open flame or any other ignition source. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Empty containers that retain product residue may be hazardous. Do not reuse container.

## 8. Exposure Controls / Personal Protection

### Component Exposure Limits

#### Oil Mist (mineral)

|            |      |         |      |                     |       |         |       |                       |
|------------|------|---------|------|---------------------|-------|---------|-------|-----------------------|
| ACGIH TLV: | TWA: | N/A ppm | TWA: | 5 mg/m <sup>3</sup> | STEL: | N/A ppm | STEL: | 10 mg/m <sup>3</sup>  |
| OSHA PEL:  | TWA: | N/A ppm | TWA: | 5 mg/m <sup>3</sup> | STEL: | N/A ppm | STEL: | N/A mg/m <sup>3</sup> |
| NIOSH REL: | TWA: | N/A ppm | TWA: | 5 mg/m <sup>3</sup> | STEL: | N/A ppm | STEL: | 10 mg/m <sup>3</sup>  |

N/A signifies not available

### Engineering Controls

Material should be handled in enclosed vessels and equipment. Use only in 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.

### Eye/Face Protection

Chemical goggles or face shield.

### Skin Protection

Chemical resistant, impervious gloves complying with an approved standard should be worn at all times. Coveralls, apron, and boots as necessary to minimize contact.

### Respiratory Protection

Use a properly fitted, air-purifying or air-fed respirator complying with

## 8. Exposure Controls / Personal Protection

### General Hygiene

an approved standard if a risk assessment indicated this is necessary. Respirator selection must be based on known or anticipated exposure levels.  
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.

## 9. Physical and Chemical Properties

|                           |                 |                                       |               |
|---------------------------|-----------------|---------------------------------------|---------------|
| <b>Appearance</b>         | Green           | <b>Vapor Pressure (mm Hg at 20°C)</b> | 0             |
| <b>Odor</b>               | Hydrocarbon oil | <b>Water Soluble</b>                  | No            |
| <b>Physical State</b>     | Liquid          | <b>Specific Gravity (g/cc)</b>        | .880          |
| <b>Flash Point (°F)</b>   | 420             | <b>Density (lbs/gal)</b>              | 7.341         |
| <b>Boiling Point (°F)</b> | >625            | <b>pH</b>                             | Not available |

## 10. Chemical Stability & Reactivity Information

|                                         |                                                                                                |
|-----------------------------------------|------------------------------------------------------------------------------------------------|
| <b>Stability</b>                        | Stable under normal conditions                                                                 |
| <b>Polymerization</b>                   | No polymerization                                                                              |
| <b>Incompatibility</b>                  | Strong acids and oxidizing materials                                                           |
| <b>Conditions to Avoid</b>              | High temperatures                                                                              |
| <b>Hazardous Decomposition Products</b> | Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. |

## 11. Toxicological Information

### Acute Exposure

#### Respiratory Irritation

If material is misted or if vapors are generated from heating, exposure may cause irritation of mucous membranes and the upper respiratory tract. Based on data from components or similar materials.

#### Eye Irritation

May cause eye irritation. Vapors formed from heating may cause eye irritation.

#### Skin Irritation

Short term skin contact is not expected to cause skin irritation. Prolonged or repeated direct exposure to the skin may result in symptoms of irritation and redness.

#### Sensitization

Not expected to cause skin or respiratory sensitization.

### Component Analysis – LD50 / LC50

#### Acute Toxicity Estimate (ATE) Values for Product:

|                            |                |
|----------------------------|----------------|
| <b>Inhalation LC50 Rat</b> | 9.68 mg/L 1 HR |
| <b>Oral LD50 Rat</b>       | >5000 mg/kg    |
| <b>Dermal LD50 Rabbit</b>  | >3000 mg/kg    |

\*21.50% of the mixture's inhalation LC50 Value is unknown

### Chronic Exposure

#### Target Organ Effects

This product contains para-dodecylphenol. Rats given high, repeated daily doses of para-dodecylphenol by oral intubation experienced effects on a number of organs including adrenal, thyroid, liver, ovary, testes, bone marrow and blood cell formation. The relevance of these effects to humans is uncertain.

#### Carcinogenicity

This product contains mineral oils which are considered to be severely refined and not considered to be carcinogenic under IARC. All of the oils in this product have been demonstrated to contain less than 3% extractables by the IP 346 test.

#### Mutagenicity

No data available to indicate product or any components present at greater than .1% are mutagenic or genotoxic.

#### Reproductive Toxicity

This product contains para-dodecylphenol. Rats given high, repeated daily doses of para-dodecylphenol by oral intubation experienced adverse reproductive effects. The relevance of these effects to humans is uncertain.

#### Teratogenicity

This product contains para-dodecylphenol. Pregnant rats given high, repeated daily doses of para-dodecylphenol by oral intubation gave birth to pups with cleft palate and skeletal malformations. The relevance of these effects to humans is uncertain.

## 12. Ecological Information

### Component Analysis- Ecotoxicity – Aquatic Life

#### Duration/Test/Species

96 Hr LC50

Pimephales promelas

#### Concentration/Conditions

N/A mg/L

#### Degradability

Not readily degradable

#### Bioaccumulation

Not determined

#### Soil Mobility

Not determined

## 13. Disposal Considerations

### Disposal Instructions

The generation of waste should be avoided or minimized wherever possible. Treatment, storage, transportation and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

## 14. Transportation Information

#### Emergency Response Guide No.

128

North American Emergency Response  
Guide Book

#### UN Number

#### Shipping Name (technical name)

#### Hazard Class

#### Packing Group

#### U.S. DOT

Not Regulated

#### 14. Transportation Information

**Bulk**

**U.S. DOT**

Not Regulated

**Non-Bulk**

#### 15. Regulatory Information

**SARA Extremely Hazardous  
Substances (Sections 302 & 304)**

This product does not contain greater than 1% of any “extremely hazardous substances” listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

**SARA Section 313**

This product contains NONE of the substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

**SARA Section 311 & 312 Classifications**

**Acute Hazard** Yes

**Chronic Hazard** Yes

**Fire Hazard** No

**Reactivity Hazard** No

**CERCLA**

This product does not contain any “hazardous substances” listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4.

**California Prop 65**

This product contains the following chemical(s) known to the state of California to cause cancer and/or birth defects based on maximum impurity levels of components: .067 ppm cadmium, .065 ppm arsenic, .068 ppm lead, 2.1 ppm benzene, .003% toluene, 150 ppm naphthalene, and .001 ppm ethyl benzene.

**Clean Water Act / Oil  
Pollution Act**

This product contains petroleum distillates and is subject to regulation by Section 311 of the Clean Water Act and the Oil Pollution Act. Releases of the product into or leading to surface waters must be reported to the National Response Center at 1-800-424-8802.

#### Global Chemical Inventories

| Inventory   | Component             |
|-------------|-----------------------|
|             | <b>All components</b> |
| US TSCA     | Present               |
| EU          | Present               |
| Japan       | Not available         |
| Australia   | Present               |
| New Zealand | Not available         |
| Canada      | Present               |
| Switzerland | Not available         |
| Korea       | Present               |
| Philippines | Present               |
| China       | Present               |
| Taiwan      | Not available         |

## 16. Other Information

### US NFPA Ratings

| Health | Fire | Reactivity |
|--------|------|------------|
| 2      | 1    | 0          |

### HMIS Ratings

| Health | Fire | Physical Hazards |
|--------|------|------------------|
| 2      | 1    | 0                |

### Precautionary Labels

#### Signal Word

WARNING!

Harmful if inhaled

Harmful if absorbed through skin.

May cause internal organ effects based on chronic studies with laboratory animals

May cause eye irritation

May cause respiratory tract irritation

11/30/2011

#### Preparation/Revision Date

#### Revision Reason

Outdated

#### Prepared By:

Jenna Prechtl, Product Compliance Coordinator

*The information provided on this MSDS 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.*

**End of MSDS**