

**AMERICAN REFINING GROUP INC.  
MATERIAL SAFETY DATA SHEET**

**THERMOIL BATTERY OIL**

**PRODUCT CODE: 4392B**

**NFPA HAZARD RATING**

**4 – Extreme  
3 – High  
2 – Moderate  
1 – Insignificant**

**PRODUCT NFPA HAZARD RATING**

**Health – 0  
Fire – 1  
Reactivity – 0**

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**DIVISION AND LOCATION---SECTION I**

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Division: LUBRICANTS AND SPECIALTLY PRODUCTS DIVISION

Location: BRADFORD, PENNSYLVANIA

77 N. KENDALL AVE., BRADFORD, PA, 16701

Emergency Telephone Number: (814) 368-1297

Transportation Emergency: CHEMTREC 1-(800) 424-9300 (U.S. and Canada)

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**CHEMICAL AND PHYSICAL PROPERTIES---SECTION II**

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Chemical Name:

hydrocarbon plus additives

Formula: not applicable

Hazardous Decomposition Products:

carbon monoxide, carbon dioxide

Incompatibility (Keep away from):

strong oxidizers such as hydrogen peroxide, bromine, and chromic acid.

| Product Components:                      | CAS #      | % (Volume) |
|--|------------|------------|
| Hydrocarbon Base Oil                     | 68649-11-6 | 60 – 70    |
| Light Naphthenic Hydrotreated Distillate | 64742-53-6 | 20 – 30    |
| Additives                                | Mixture    | 10 – 15    |

Form: liquid

Odor: mild motor oil

Appearance: liquid

Color: blue

Specific Gravity (water=1): .85

Boiling Point: greater than 204°C (400°F)

Melting Point: -45°C (-50°F)

Solubility in Water (by weight %) : 0 at 20°C

Evaporation Rate: not determined

Vapor Pressure (mm Hg at 20°C): 0

Vapor Density (air=1) : not volatile

pH (as is) : not applicable

Stability: Product is stable under normal conditions

Viscosity SUS at 100°F: Greater than or = to 100

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**FIRE AND EXPLOSION DATA—SECTION III**

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**Special Fire Fighting Procedures:**

Do not use water except as fog.

**Unusual Fire and Explosion Hazards:**

Do not cut, weld, braze, solder, drill, grind or expose containers, drums, tanks, etc. of product to heat, flame, sparks, static electricity or other sources of ignition; they may ignite explosively.

Flashpoint: (Method Used) Cleveland open cup greater than 150°C (302°F)

Flammable limits % : not applicable

**Extinguishing accents:**

Drychemical or Waterfog or CO<sub>2</sub> or Foam

Closed containers exposed to fire may be cooled with water.

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**HEALTH HAZARD DATA---SECTION IV**

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**Permissible concentrations (air):**

If used in applications where a mist may be generated, observe a TWA/PEL of 5 mg/m<sup>3</sup> for mineral oil mist (OSHA and ACGIH).

**Chronic effects of overexposure:**

Prolonged or repeated skin contact may cause dermatitis (skin irritation)

**Acute toxicological properties:**

No data available

**Emergency First Aid Procedures:**

Eyes: Immediately flush with large quantities of water for at least 15 minutes and call a physician.

Skin Contact: Remove excess with cloth or paper. Wash thoroughly with soap and water.

Inhalation: Remove victim to fresh air. Call a physician.

If Swallowed: Contact a physician immediately.

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**SPECIAL PROTECTION INFORMATION---SECTION V**

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**Ventilation Type Required (Local, mechanical, special):**

Local if necessary to maintain allowable PEL(permissible exposure limit) or TLV(threshold limit value)

**Respiratory Protection (Specify type):**

Use NIOSH/MSHA certified respirator with dual organic vapor/mist and particulates cartridge if vapor concentration exceeds permissible exposure limit.

**Protective Gloves:**

neoprene type

**Eye Protection:**

chemical safety goggles

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Other Protective Equipment:  
none

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**HANDLING OF SPILLS OR LEAKS---SECTION VI**

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Procedures for Clean-Up:

Transfer bulk of mixture into another container. Absorb residue with an inert material such as earth, sand or vermiculite. Sweep up and dispose as solid waste in accordance with local, state and federal regulations.

Waste Disposal:

Dispose of in accordance with all applicable federal, state and local regulations.

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**SPECIAL PRECAUTIONS---SECTION VII**

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Precautions to be taken in handling and storage:

Do not store at temperatures in excess of 120 deg F (49 deg C) for extended periods of time.

Short term storage temperature should not exceed

Maximum Storage Temperature: 64° C (147°F)

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**TRANSPORTATION DATA---SECTION VIII**

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D.O.T. : Not Regulated

Reportable Quantity: not applicable

Freight Classification: Lubricating oil

Special Transportation Notes:

none

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**ENVIRONMENTAL/SAFETY REGULATIONS---SECTION IX**

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Section 313 (Title III Superfund Amendment and Reauthorization Act):

This product does not contain any chemical 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

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COMMENTS

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The component(s) of this product are on the US TSCA Inventory and Canadian Domestic Substance List

Prepared by: ROBERT M. KELLAM

Title: PRODUCT SAFETY AND HEALTH COORDINATOR

Original Date: 01/31/10      Sent to: -----

Revision Date: -----

Supersedes: -----

Date Sent: -----

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