



MATERIAL SAFETY DATA SHEET

Diesel Treat

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name: Diesel Treat
Product Number: LG-DCAG-946, LG-DCAG-1.9
Product Use: Motor fuel additive.
Manufacturer/Supplier: R.B. Howes & Co., Inc. / Howes Lubricator
60 Ocean State Drive
North Kingstown, RI
Phone Number: 1-401-294-5500, 1-800 GET HOWES (438-4693)
Emergency Phone: CHEMTREC: 1-800-424-9300
Date of Preparation: June 1, 2015

Section 2: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

WARNING

COMBUSTIBLE LIQUID. HARMFUL IF SWALLOWED. MAY CAUSE EYE IRRITATION. IRRITATING TO SKIN. HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED. MAY CAUSE CANCER. MAY CAUSE TERATOGENICITY AND EMBRYOTOXICITY.

Potential Health Effects: See Section 11 for more information.

Likely Routes of Exposure: Skin contact, eye contact, inhalation, and ingestion.

Eye: May cause eye irritation.
Skin: Irritating to skin.
Ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting. Harmful: may cause lung damage if swallowed.
Inhalation: May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis.

Chronic Effects: Contains ingredients known or suspected to be carcinogenic, teratogenic and/or embryotoxic.

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

Medical Conditions Aggravated By Exposure: Asthma. Allergies.

Target Organs: Skin, eyes, gastrointestinal tract, respiratory system.

Potential Environmental Effects: May cause long-term adverse effects in the aquatic environment. See Section 12 for more information.

Section 3: COMPOSITION / INFORMATION ON INGREDIENTS

| Ingredient | CAS # | Wt. % |
|--|------------|---------|
| Distillates (petroleum), hydrotreated middle | 64742-46-7 | 40 - 70 |
| Stoddard solvent | 8052-41-3 | 15 - 40 |
| Distillates (petroleum), hydrotreated light | 64742-47-8 | 10 - 30 |
| Light aromatic solvent naphtha (petroleum) | 64742-95-6 | 1 - 5 |
| 1,2,4-Trimethylbenzene | 95-63-6 | 1 - 5 |

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| | | |
|---|------------|---------|
| Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) | 68603-38-3 | 1 - 5 |
| Nonane | 111-84-2 | 1 - 5 |
| Xylene | 1330-20-7 | 0.1 - 1 |
| Naphthalene | 91-20-3 | 0.1 - 1 |
| 1,3,5-Trimethylbenzene | 108-67-8 | 0.1 - 1 |
| Ethylbenzene | 100-41-4 | 0.1 - 1 |

Section 4: FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water. Remove contact lenses, if worn. If irritation persists, get medical attention.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Call a physician if irritation develops and persists.

Inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical advice/attention if you feel unwell.

Ingestion: If swallowed, do NOT induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention or call poison control immediately.

General Advice: In case of accident or if you feel unwell, seek medical advice immediately (show the label or MSDS where possible).

Note to Physicians: Symptoms may not appear immediately.

Section 5: FIRE FIGHTING MEASURES

Flammability: Combustible by WHMIS criteria.

Means of Extinction:

Suitable Extinguishing Media: Powder, water spray, foam, carbon dioxide.

Unsuitable Extinguishing Media: Do not use a heavy water stream.

Products of Combustion: May include, and are not limited to: oxides of carbon.

Explosion Data:

Sensitivity to Mechanical Impact: Not available.

Sensitivity to Static Discharge: Not available.

Protection of Firefighters: Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

Section 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Eliminate sources of ignition.

Environmental Precautions: Keep out of drains, sewers, ditches, and waterways. Minimize use of water to prevent environmental contamination.

Methods for Containment: Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE).

Methods for Clean-Up: Scoop up material and place in a disposal container. Provide ventilation.

Other Information: Not available.

Section 7: HANDLING AND STORAGE

Handling:

Keep away from sources of ignition. No smoking. Avoid contact with skin and eyes. Do not swallow. Do not breathe gas/fumes/vapor/spray. Use only in well-ventilated areas. Handle and open container with care. Use non-sparking tools. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

Storage:

Keep locked up and out of reach of children. Keep container tightly closed and in a well-ventilated place. Keep cool.

Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

| Ingredient | Exposure Limits ACGIH-TLV |
|---|--------------------------------------|
| Distillates (petroleum), hydrotreated middle | Not available. |
| Stoddard solvent | 100 ppm |
| Distillates (petroleum), hydrotreated light | Not available. |
| Light aromatic solvent naphtha (petroleum) | Not available. |
| 1,2,4-Trimethylbenzene | Not available. |
| Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) | Not available. |
| Nonane | 200 ppm |
| Xylene | 100 ppm |
| Naphthalene | 10 ppm |
| 1,3,5-Trimethylbenzene | 25 ppm |
| Ethylbenzene | 20 ppm |

Engineering Controls: Use ventilation adequate to keep exposures (airborne levels of dust, fume, vapor, etc.) below recommended exposure limits.

Personal Protective Equipment:

Eye/Face Protection: Wear eye/face protection.

Hand Protection: Wear suitable gloves.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

General Hygiene Considerations: Handle according to established industrial hygiene and safety practices.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

| | |
|-------------------------|-----------------------------|
| Appearance: | Not available. |
| Colour: | Light amber. |
| Odour: | Distinctive. |
| Odour Threshold: | Not available. |
| Physical State: | Liquid. |
| pH: | Not available. |
| Viscosity: | < 20.5 cSt @ 40 °C (104 °F) |

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| | |
|---|------------------------|
| Freezing Point: | Not available. |
| Boiling Point: | 164 °C (327.2 °F) |
| Flash Point: | > 65.5 °C (> 149.9 °F) |
| Evaporation Rate: | Not available. |
| Lower Flammability Limit: | Not available. |
| Upper Flammability Limit: | Not available. |
| Vapor Pressure: | < 0.1 mm Hg |
| Vapor Density: | Not available. |
| Specific Gravity: | < 0.9 |
| Solubility in Water: | Insoluble. |
| Coefficient of Water/Oil Distribution: | Not available. |
| Auto-ignition Temperature: | Not available. |
| Percent Volatile, wt. %: | Not available. |
| VOC content, wt. %: | Not available. |

Section 10: STABILITY AND REACTIVITY

Stability: Stable under normal storage conditions. Keep in a cool place.

Conditions of Reactivity: Heat. Incompatible materials.

Incompatible Materials: Strong oxidizers.

Hazardous Decomposition Products: May include, and are not limited to: oxides of carbon.

Possibility of Hazardous Reactions: No dangerous reaction known under conditions of normal use.

Section 11: TOXICOLOGY INFORMATION

EFFECTS OF ACUTE EXPOSURE

Component Analysis

| Ingredient | LD ₅₀ (oral) | LC ₅₀ |
|---|-------------------------|--|
| Distillates (petroleum), hydrotreated middle | > 5000 mg/kg, rat | 4.6 mg/L 4hr, rat |
| Stoddard solvent | Not available. | Not available. |
| Distillates (petroleum), hydrotreated light | > 5000 mg/kg, rat | > 5.2 mg/L 4hr, rat > 5.2mg/L 4hr, rat; |
| Light aromatic solvent naphtha (petroleum) | 8400 mg/kg, rat | 3400 ppm 4hr, rat |
| 1,2,4-Trimethylbenzene | 3280 mg/kg, rat | 18000 mg/m ³ 4hr, rat |
| Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) | > 3000 mg/kg, rat | Not available. |
| Nonane | Not available. | 3200 ppm 4hr, rat |
| Xylene | 4300 mg/kg, rat | 5000 ppm 4hr, rat > 340 mg/m ³ 1hr, rat; |
| Naphthalene | 490 mg/kg, rat | > 0.4 mg/L 4hr, rat |
| 1,3,5-Trimethylbenzene | Not available. | 24000 mg/m ³ 4hr, rat |
| Ethylbenzene | 3500 mg/kg, rat | 17.2 mg/L 4hr, rat |

Eye: May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling.

Skin: Irritating to skin. Symptoms may include redness, edema, drying, defatting and cracking of the skin.



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Ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting. Harmful: may cause lung damage if swallowed.

Inhalation: May cause respiratory tract irritation. This product may be aspirated into the lungs and cause chemical pneumonitis.

EFFECTS OF CHRONIC EXPOSURE

Target Organs: Not available.

Chronic Effects: Not hazardous by WHMIS criteria.

Carcinogenicity: Hazardous by WHMIS criteria.

Ingredient

Chemical Listed as Carcinogen or Potential Carcinogen *

Distillates (petroleum), hydrotreated middle Stoddard solvent
Distillates (petroleum), hydrotreated light
Light aromatic solvent naphtha (petroleum)
1,2,4-Trimethylbenzene
Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl)
Nonane
Xylene
Naphthalene
1,3,5-Trimethylbenzene
Ethylbenzene

Not listed.
Not listed.
Not listed.
Not listed.
Not listed.
Not listed.
G-A4, I-3
G-A4, I-2B, N-2
Not listed.
G-A3, I-2B

* See Section 15 for more information.

Mutagenicity: Not hazardous by WHMIS criteria.

Reproductive Effects: Not hazardous by WHMIS criteria.

Developmental Effects:

Teratogenicity: Hazardous by WHMIS criteria.

Embryotoxicity: Hazardous by WHMIS criteria.

Respiratory Sensitization: Not hazardous by WHMIS criteria.

Skin Sensitization: Not hazardous by WHMIS criteria.

Toxicologically Synergistic Materials: Not available.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: May cause long-term adverse effects in the aquatic environment.

Persistence / Degradability: Not available.

Bioaccumulation / Accumulation: Not available.

Mobility in Environment: Not available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal Instructions:

This material must be disposed of in accordance with all local, state, provincial, and federal regulations.

Section 14: TRANSPORTATION INFORMATION

TDG Classification
Not regulated

Section 15: REGULATORY INFORMATION

Federal Regulations

Canada: 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.

Global Inventories

| Ingredient | Canada DSL/NDSL |
|---|--------------------|
| Distillates (petroleum), hydrotreated middle | DSL |
| Stoddard solvent | DSL |
| Distillates (petroleum), hydrotreated light | DSL |
| Light aromatic solvent naphtha (petroleum) | DSL |
| 1,2,4-Trimethylbenzene | DSL |
| Amides, C16-18 and C18-unsatd., N,N-bis(hydroxyethyl) | DSL |
| Nonane | DSL |
| Xylene | DSL |
| Naphthalene | DSL |
| 1,3,5-Trimethylbenzene | DSL |
| Ethylbenzene | DSL |

HMIS - Hazardous Materials Identification System

Health - 2* Flammability - 2 Physical Hazard - 0 PPE – B

NFPA - National Fire Protection Association:

Health - 2 Fire - 2 Reactivity - 0

Hazard Rating: 0 = minimal, 1 = slight, 2 = moderate, 3 = severe, 4 = extreme

WHMIS Classification(s):

- Class B3 - Combustible Liquid
- Class D2A - Carcinogenicity
- Class D2A - Teratogenicity and Embryotoxicity
- Class D2B - Skin/Eye Irritant

WHMIS Hazard Symbols:



SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:

ACGIH (G) American Conference of Governmental Industrial Hygienists.

- A1 - Confirmed human carcinogen.
- A2 - Suspected human carcinogen.
- A3 - Animal carcinogen.
- A4 - Not classifiable as a human carcinogen.
- A5 - Not suspected as a human carcinogen.

IARC (I) International Agency for Research on Cancer.

- 1 - The agent (mixture) is carcinogenic to humans.
- 2A - The agent (mixture) is probably carcinogenic to humans; there is limited evidence of carcinogenicity in humans and sufficient evidence of carcinogenicity in experimental animals.
- 2B - The agent (mixture) is possibly carcinogenic to humans; there is limited evidence of carcinogenicity in humans in the absence of sufficient evidence of carcinogenicity in experimental animals.
- 3 - The agent (mixture, exposure circumstance) is not classifiable as to its carcinogenicity to humans.
- 4 - The agent (mixture, exposure circumstance) is probably not carcinogenic to humans.

NTP (N) National Toxicology Program.

- 1 - Known to be carcinogens.
- 2 - Reasonably anticipated to be carcinogens.

Section 16: OTHER INFORMATION

Disclaimer:

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. It is the user's responsibility to satisfy oneself as to the suitability and completeness of this information for the user's own particular use.

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