

# HI-GEAR PREMIUM DIESEL FUEL CONDITIONER

Date Prepared: 02/2012

## MATERIAL SAFETY DATA SHEET

### Section 1: PRODUCT AND COMPANY IDENTIFICATION

Name of Supplier:

**NLS PRODUCTS**

**BOX 790, 1 Lakewood Cres**

**Bobcaygeon, ON**

**K0M 1A0**

**Tel: (705) 738-2321 Fax: (705) 738-4550 EMAIL: mail@nlsproducts.ca**

**Product Name:** Diesel Fuel Conditioner

**Product Number:** HG910

**Product Use:** Additive.

**Manufacturer:** Hi-Gear, Inc. 14 Brent Drive Hudson, MA 01749

**Emergency Phone:** CHEMTREC: 1-800-424-9300 (US and Canada)  
1-703-527-3887 (International)

### Section 2: HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

##### CAUTION

COMBUSTIBLE LIQUID. HARMFUL IF SWALLOWED. IRRITATING TO EYES. MAY CAUSE SKIN IRRITATION. HARMFUL: MAY CAUSE LUNG DAMAGE IF SWALLOWED.

**Potential Health Effects:** See Section 11 for more information.

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

**Eye:** Irritating to eyes. Risk of serious damage to eyes.

**Skin:** May cause skin irritation.

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

**Inhalation:** May cause respiratory tract irritation. Inhalation of vapours may cause drowsiness, dizziness, headaches, unconsciousness, CNS effects, and even death. This product may be aspirated into the lungs and cause chemical pneumonitis.

**Chronic Effects:** Prolonged or repeated contact may dry skin and cause irritation and dermatitis.

**Signs and Symptoms:** Severe eye irritation, redness and pain. Symptoms may include redness, edema, drying, defatting and cracking of the skin.

**Medical Conditions Aggravated By Exposure:** Because of its irritating properties, product may aggravate preexisting skin, eye, and respiratory conditions.

**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

<b>Ingredient</b>	<b>CAS #</b>	<b>Wt. %</b>
Fuels, diesel	68334-30-5	60 - 100
1,2,4-Trimethylbenzene	95-63-6	0.1 - 1
1,3,5-Trimethylbenzene	108-67-8	0.1 - 1
Naphthalene	91-20-3	0.1 - 1
Xylene	1330-20-7	0.1 - 1
Isopropylbenzene	98-82-8	0.1 - 1

### Section 4: FIRST AID MEASURES

- Eye Contact:** In case of contact, immediately flush eyes with plenty of water for at least 15 minutes, including under lids. If easy to do, remove contact lenses, if worn. Get medical attention immediately.
- Skin Contact:** In case of contact, immediately flush skin with plenty of soap and 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 attention.
- Ingestion:** If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. If conscious, give plenty of milk or water to drink. 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.

**Unsuitable Extinguishing Media:** Do not use a direct stream of water.

**Products of Combustion:** May include, and are not limited to: oxides of carbon, oxides of nitrogen, toxic fumes.

**Explosion Data:**

**Sensitivity to Mechanical Impact:** Not available.

**Sensitivity to Static Discharge:** Not available.

**Protection of Firefighters:** Vapours can flow to distant ignition sources and flash back. Use water spray to keep fire-exposed containers cool. 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:** Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). 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. Launder contaminated clothing before reuse. Follow proper bonding and grounding procedures. When using do not eat or drink. Wash hands before eating, drinking, or smoking.

### Storage:

Keep out of the reach of children. Keep container tightly closed and in a well-ventilated place. Store in a cool place, away from incompatibles. Store away from light.

## Section 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

### Exposure Guidelines

Ingredient	Exposure Limits ACGIH-TLV
Fuels, diesel	100 mg/m <sup>3</sup>
1,2,4-Trimethylbenzene	Not available.
1,3,5-Trimethylbenzene	25 ppm
Naphthalene	10 ppm
Xylene	100 ppm
Isopropylbenzene	50 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

<b>Appearance:</b>	Clear.
<b>Colour:</b>	Amber.
<b>Odour:</b>	Amine / aromatic odour.
<b>Odour Threshold:</b>	Not available.
<b>Physical State:</b>	Liquid.
<b>pH:</b>	Not available.
<b>Viscosity:</b>	Not available.

<b>Freezing Point:</b>	Not available.
<b>Boiling Point:</b>	Not available.
<b>Flash Point:</b>	~ 46 °C (115 °F)
<b>Evaporation Rate:</b>	Not available.
<b>Lower Flammability Limit:</b>	0.6
<b>Upper Flammability Limit:</b>	7
<b>Vapor Pressure:</b>	3 mmHg @ 38 °C (100 °F)
<b>Vapor Density:</b>	Not available.
<b>Specific Gravity:</b>	0.90 @ 16 °C (60 °F) (typical)
<b>Solubility in Water:</b>	Negligible.
<b>Coefficient of Water/Oil Distribution:</b>	Not available.
<b>Auto-ignition Temperature:</b>	~ 450 °C (842 °F)
<b>Percent Volatile, wt. %:</b>	Not available.
<b>VOC content, wt. %:</b>	Not available.

#### Section 10: STABILITY AND REACTIVITY

**Stability:** Unstable at temperatures above 100 °C (212 °F). 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, oxides of nitrogen, toxic fumes.

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

#### Section 11: TOXICOLOGY INFORMATION

##### EFFECTS OF ACUTE EXPOSURE

##### Component Analysis

<b>Ingredient</b>	<b>LD<sub>50</sub> (oral)</b>	<b>LC<sub>50</sub></b>
Fuels, diesel	> 5000 mg/kg, rat	4.6 mg/L 4hr, rat
1,2,4-Trimethylbenzene	3400 mg/kg, rat	18000 mg/m <sup>3</sup> 4 hrs, rat
1,3,5-Trimethylbenzene	5000 mg/kg, rat	24000 mg/m <sup>3</sup> 4hr, rat
Naphthalene	490 mg/kg, rat	> 340 mg/m <sup>3</sup> 1hr, rat
Xylene	4300 mg/kg, rat	5000 ppm 4hr, rat
Isopropylbenzene	1400 mg/kg, rat	39000 mg/m <sup>3</sup> 4 hr, rat

**Eye:** Irritating to eyes. Risk of serious damage to eyes. Severe irritation, redness and pain.

**Skin:** May cause skin irritation. Symptoms may include redness, edema, drying, defatting and cracking of the 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. Inhalation of vapours may cause drowsiness, dizziness, headaches, unconsciousness, CNS effects, and even death. 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 \***

Fuels, diesel

G-A3, I-2B, O

1,2,4-Trimethylbenzene

Not listed.

1,3,5-Trimethylbenzene

Not listed.

Naphthalene

G-A4, I-2B, N-2, CP65

Xylene

G-A4, I-3

Isopropylbenzene

I-2B, N-2, CP65

\* 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. Do not empty into drains.

**Section 14: TRANSPORTATION INFORMATION**

**TDG Classification**

UN1202; DIESEL FUEL; Class 3; PG III

Limited Quantity ( $\leq 5L$ )

**Section 15: REGULATORY INFORMATION**

**Federal Regulations**

**Canadian:** 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/NDL**

Fuels, diesel

DSL

1,2,4-Trimethylbenzene

DSL

1,3,5-Trimethylbenzene  
Naphthalene  
Xylene  
Isopropylbenzene

DSL  
DSL  
DSL  
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

**SOURCE AGENCY CARCINOGEN CLASSIFICATIONS:**

**OSHA (O)** Occupational Safety and Health Administration.

**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.

<b>Section 16: OTHER INFORMATION</b>
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**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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