

HI GEAR DIESEL MOISTURE REMOVER WITH LUBRICITY

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) 738-2323 Fax: (705)738-4550 Email: mail@nlsproducts.ca

Product Name: Hi –Gear Premium Diesel Moisture Remover
Product Number: HG410
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

WARNING

COMBUSTIBLE LIQUID. TOXIC IN CONTACT WITH SKIN. 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, skin absorption, eye contact, inhalation, and ingestion.

Eye: Irritating to eyes.
Skin: Toxic in contact with skin. May cause skin irritation. May be absorbed through skin in harmful amounts.
Ingestion: Harmful if swallowed. May cause stomach distress, nausea or vomiting. Harmful: may cause lung damage if swallowed.
Inhalation: Inhalation of mists/vapours may be harmful. This product may be aspirated into the lungs and cause chemical pneumonitis.

Chronic Effects: Long term inhalation of mists/vapours may result in chronic damage including blood abnormalities.

Signs and Symptoms: Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva. 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: Eyes, skin, respiratory system, gastrointestinal tract, liver, kidneys.

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. %
Isopropanol	67-63-0	30 - 60
Ethylene glycol monobutyl ether	111-76-2	30 - 60

Section 4: FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. 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 breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention immediately.

Ingestion: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Seek medical attention or call poison control.

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: Not available.

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: Vapours can flow to distant ignition sources and flash back. Keep up-wind 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. Remove product from water surfaces by skimming or with suitable absorbents. 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. 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
Isopropanol	200 ppm
Ethylene glycol monobutyl ether	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:	Clear.
Color:	Colorless.
Odour:	Mild ether odour.
Odour Threshold:	Not available.
Physical State:	Liquid.
pH:	Not available.
Viscosity:	Not available.
Freezing Point:	Not available.
Boiling Point:	120 - 173 °C (250 - 343 °F)
Flash Point:	~ 42 °C (108 °F)
Evaporation Rate:	Not available.
Lower Flammability Limit:	Not available.
Upper Flammability Limit:	Not available.

Vapor Pressure:	0.660 @ 20 °C (68 °F)
Vapor Density:	Not available.
Specific Gravity:	0.901 - 0.904 @ 20 °C (68 °F)
Solubility in Water:	Miscible.
Coefficient of Water/Oil Distribution:	Not available.
Auto-ignition Temperature:	~ 118 °C (244 °F)
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	LD₅₀ (oral)	LC₅₀
Isopropanol	4396 mg/kg, rat	72.6 mg/L 4hr, rat 450 ppm 4hr, rat;
Ethylene glycol monobutyl ether	470 mg/kg, rat	2.21 mg/L 4hr, rat

Eye: Irritating to eyes. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

Skin: Toxic in contact with skin. May cause skin irritation. May be absorbed through skin in harmful amounts. 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: Inhalation of mists/vapours may be harmful. 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: Not hazardous by WHMIS criteria.

Ingredient	Chemical Listed as Carcinogen or Potential Carcinogen *
Isopropanol	G-A4, I-3
Ethylene glycol monobutyl ether	I-3

* See Section 15 for more information.

Mutagenicity: Not hazardous by WHMIS criteria.

Reproductive Effects: Not hazardous by WHMIS criteria.

Developmental Effects:

Teratogenicity: Not hazardous by WHMIS criteria.

Embryotoxicity: Not 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

UN1993; FLAMMABLE LIQUID, N.O.S. (Isopropanol, Ethylene glycol monobutyl ether); 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

Isopropanol
Ethylene glycol monobutyl ether

**Canada
DSL/NDL**
DSL
DSL

HMIS - Hazardous Materials Identification System

Health - 2

Flammability - 2

Physical Hazard - 0

PPE – C

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.

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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