

POLY-DRILL ENVIROGREASE

Chemwatch Material Safety Data Sheet

Review Date: 24-Sep-2008

NA517EC

CHEMWATCH 16-8178

Version No:2.0

CD 2010/1 Page 1 of 10

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME

POLY-DRILL ENVIROGREASE

STATEMENT OF HAZARDOUS NATURE

Not considered a hazardous substance according to the Controlled Products Regulations

SUPPLIER

Company: Poly- Drill

Address:

2192 - 8800 Venture Ave SE

Calgary

Alberta, T3S 0A2

CAN

Telephone: +1 403 259 5112

Emergency Tel: +1 403 540 7080

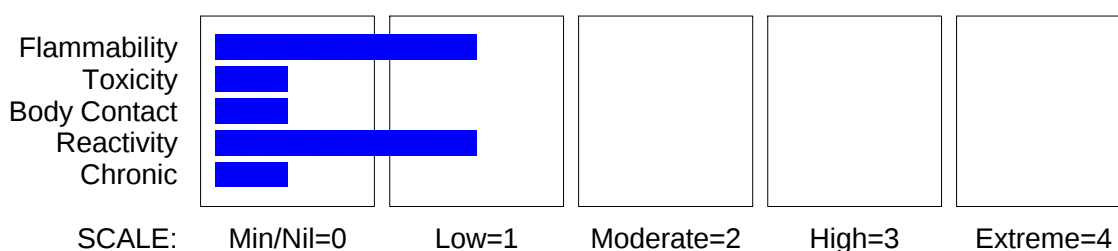
Fax: +1 403 255 7185

PRODUCT USE

Grease, lubricant for diamond drill rods.

Section 2 - HAZARDS IDENTIFICATION

CHEMWATCH HAZARD RATINGS



CANADIAN WHMIS SYMBOLS

None

EMERGENCY OVERVIEW

RISK

POTENTIAL HEALTH EFFECTS

ACUTE HEALTH EFFECTS

SWALLOWED

■ The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract

continued...

POLY-DRILL ENVIROGREASE

Chemwatch Material Safety Data Sheet
Review Date: 24-Sep-2008
NA517EC

CHEMWATCH 16-8178
Version No:2.0
CD 2010/1 Page 2 of 10
Section 2 - HAZARDS IDENTIFICATION

discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

EYE

■ Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn).

SKIN

■ The material is not thought to produce adverse health effects or skin irritation following contact (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.

■ The liquid may be miscible with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives .

INHALED

■ The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.

CHRONIC HEALTH EFFECTS

■ Long-term exposure to the product is not thought to produce chronic effects adverse to health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

NAME	CAS RN	%
vegetable oils	68956-68-3	N/S
inorganic inert		N/S
viscosifiers		N/S
tackifiers		N/S

Section 4 - FIRST AID MEASURES

SWALLOWED

- Immediately give a glass of water.
- First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.

EYE

- If this product comes in contact with eyes:
 - Wash out immediately with water.
 - If irritation continues, seek medical attention.
 - Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN

- If skin or hair contact occurs:
 - Flush skin and hair with running water (and soap if available).
 - Seek medical attention in event of irritation.

INHALED

- If fumes or combustion products are inhaled remove from contaminated area.
- Other measures are usually unnecessary.

continued...

POLY-DRILL ENVIROGREASE

Chemwatch Material Safety Data Sheet
Review Date: 24-Sep-2008
NA517EC

CHEMWATCH 16-8178
Version No:2.0
CD 2010/1 Page 3 of 10
Section 4 - FIRST AID MEASURES

NOTES TO PHYSICIAN

- Treat symptomatically.

Section 5 - FIRE FIGHTING MEASURES

Vapour Pressure (kPa): Not Available
Upper Explosive Limit (%): Not Available
Specific Gravity (water=1): 0.99
Lower Explosive Limit (%): Not Available

EXTINGUISHING MEDIA

- Foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog - Large fires only.

FIRE FIGHTING

- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- Avoid spraying water onto liquid pools.
- Do not approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.

GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

- Combustible.
- Slight fire hazard when exposed to heat or flame.
- Heating may cause expansion or decomposition leading to violent rupture of containers.
- On combustion, may emit toxic fumes of carbon monoxide (CO).
- May emit acrid smoke.
- Mists containing combustible materials may be explosive.

FIRE INCOMPATIBILITY

- Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result.

PERSONAL PROTECTION

Glasses:
Chemical goggles.

Gloves:
When handling larger quantities:

Section 6 - ACCIDENTAL RELEASE MEASURES

MINOR SPILLS

- Remove all ignition sources.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Wipe up.
- Place in a suitable, labelled container for waste disposal.

continued...

POLY-DRILL ENVIROGREASE

Chemwatch Material Safety Data Sheet
Review Date: 24-Sep-2008
NA517EC

CHEMWATCH 16-8178

Version No:2.0

CD 2010/1 Page 4 of 10

Section 6 - ACCIDENTAL RELEASE MEASURES

MAJOR SPILLS

- Moderate hazard.
- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves.
- Prevent, by any means available, spillage from entering drains or water course.
- No smoking, naked lights or ignition sources.
- Increase ventilation.
- Stop leak if safe to do so.
- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite.
- Collect solid residues and seal in labelled drums for disposal.
- Wash area and prevent runoff into drains.
- If contamination of drains or waterways occurs, advise emergency services.

Section 7 - HANDLING AND STORAGE

PROCEDURE FOR HANDLING

- Avoid all personal contact, including inhalation.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Prevent concentration in hollows and sumps.
- DO NOT enter confined spaces until atmosphere has been checked.
- Avoid smoking, naked lights or ignition sources.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions.

RECOMMENDED STORAGE METHODS

- Metal can or drum
- Packaging as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

STORAGE REQUIREMENTS

- Store in original containers.
- Keep containers securely sealed.
- No smoking, naked lights or ignition sources.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

SAFE STORAGE WITH OTHER CLASSIFIED CHEMICALS



+



+



+



+



X



+

continued...

POLY-DRILL ENVIROGREASE

Chemwatch Material Safety Data Sheet
Review Date: 24-Sep-2008
NA517EC

CHEMWATCH 16-8178
Version No:2.0
CD 2010/1 Page 5 of 10
Section 7 - HANDLING AND STORAGE

+: May be stored together
O: May be stored together with specific preventions
X: Must not be stored together

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE CONTROLS

US OSHA Permissible Exposure Levels (PELs)

Z	Material	TWA ppm	TWA mg/m ³	STEL ppm	STEL mg/m ³	Peak ppm	Peak mg/m ³	Max excursion ppm	Max excursion mg/m ³	Max excursion duration (mins)	TWA F/CC
Z1	Vegetable oil mist - Total dust		15								
Z1	Vegetable oil mist - Respirable fraction		5								

Source	Material	TWA ppm	TWA mg/m ³	STEL mg/m ³	Notes
US NIOSH Recommended Exposure Limits (RELs)	vegetable oils (Vegetable oil mist)		5		
US - Minnesota Permissible Exposure Limits (PELs)	vegetable oils (Vegetable oil mist - Total dust)		15		
US - Minnesota Permissible Exposure Limits (PELs)	vegetable oils (Vegetable oil mist - Respirable fraction)		5		
US OSHA Permissible Exposure Levels (PELs) - Table Z1	vegetable oils (Vegetable oil mist - Total dust)		15		
US OSHA Permissible Exposure Levels (PELs) - Table Z1	vegetable oils (Vegetable oil mist - Respirable fraction)		5		
US NIOSH Recommended Exposure Limits (RELs)	vegetable oils (Vegetable oil mist)		10		
US - Vermont Permissible Exposure Limits Table Z- 1- A Transitional Limits for Air Contaminants	vegetable oils (Vegetable oil mist - Respirable fraction)		5		
US - Vermont Permissible Exposure Limits Table Z- 1- A Final Rule Limits for Air Contaminants	vegetable oils (Vegetable oil mist - Total dust)		15		
US - Vermont Permissible Exposure Limits Table Z- 1- A Final Rule Limits for Air Contaminants	vegetable oils (Vegetable oil mist - Respirable fraction)		5		
US - Idaho - Limits for Air Contaminants	vegetable oils (Vegetable oil mist - Total dust)		15		

continued...

POLY-DRILL ENVIROGREASE

Chemwatch Material Safety Data Sheet
Review Date: 24-Sep-2008
NA517EC

CHEMWATCH 16-8178
Version No:2.0
CD 2010/1 Page 6 of 10

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Source	Material	TWA ppm	TWA mg/m ³	STEL mg/m ³	Notes
US - Idaho - Limits for Air Contaminants	vegetable oils (Vegetable oil mist - Respirable fraction)		5		
US - Vermont Permissible Exposure Limits Table Z- 1- A Transitional Limits for Air Contaminants	vegetable oils (Vegetable oil mist - Total dust)		15		
US - Hawaii Air Contaminant Limits	vegetable oils (Vegetable oil mist - Total dust)	10			
US - Hawaii Air Contaminant Limits	vegetable oils (Vegetable oil mist - Respirable fraction)	5			
US - Alaska Limits for Air Contaminants	vegetable oils (Vegetable oil mist - Total dust)		15		
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	vegetable oils (Vegetable oil mist)		(See Table 11)		
US - Washington Permissible exposure limits of air contaminants	vegetable oils (Vegetable oil mist - Total particulate)		10	20	
US - Washington Permissible exposure limits of air contaminants	vegetable oils (Vegetable oil mist - Respirable fraction)		5	10	
US - Oregon Permissible Exposure Limits (Z1)	vegetable oils (Vegetable oil mist Total Dust)		10		*
US - Oregon Permissible Exposure Limits (Z1)	vegetable oils (Vegetable oil mist Respirable Fraction)		5		*
Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)	vegetable oils (Vegetable oil mists (except castor, cashew and other similar irritant oils))		10		
US - Alaska Limits for Air Contaminants	vegetable oils (Vegetable oil mist - Respirable dust)		5		
US - Michigan Exposure Limits for Air Contaminants	vegetable oils (Vegetable oil mists Respirable mist)		5		
US - Michigan Exposure Limits for Air Contaminants	vegetable oils (Vegetable oil mists Total mist)		15		
Canada - British Columbia Occupational Exposure Limits	vegetable oils (Vegetable oil, Mist, Respirable, except castor, cashew nut, or similar irritating oil)		3		

continued...

POLY-DRILL ENVIROGREASE

Chemwatch Material Safety Data Sheet
Review Date: 24-Sep-2008
NA517EC

CHEMWATCH 16-8178
Version No:2.0
CD 2010/1 Page 7 of 10

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Source	Material	TWA ppm	TWA mg/m ³	STEL mg/m ³	Notes
Canada - British Columbia Occupational Exposure Limits	vegetable oils (Vegetable oil - Mist, except castor, cashew nut, or similar irritant oils)		10		

MATERIAL DATA

POLY-DRILL ENVIROGREASE:

Not available

VEGETABLE OILS:

- vegetable oil mists (except castor, cashew nut and similar irritant oils)

TLV TWA: 10 mg/m³

ES TWA: 10 mg/m³

OSHA PEL TWA: 15 mg/m³, total particulate; 5 mg/m³, respirable particulate

The common vegetable oil mists are considered "nuisance" particulates which have little adverse effect on the lung. They do not produce toxic effects or significant organic disease when exposures are kept under reasonable control. Direct instillation of vegetable oils into rabbit lungs produces acute bronchitis whilst high oral doses are laxatives.

PERSONAL PROTECTION



EYE

- Safety glasses with side shields
- Chemical goggles.
- Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59].

HANDS/FEET

- Wear general protective gloves, eg. light weight rubber gloves.
- Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:
- frequency and duration of contact,
 - chemical resistance of glove material,
 - glove thickness and
 - dexterity

continued...

POLY-DRILL ENVIROGREASE

Chemwatch Material Safety Data Sheet
Review Date: 24-Sep-2008
NA517EC

CHEMWATCH 16-8178
Version No:2.0
CD 2010/1 Page 8 of 10

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739).

- When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended.
- When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended.
- Contaminated gloves should be replaced.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

OTHER

- No special equipment needed when handling small quantities.

OTHERWISE:

- Overalls.
- Barrier cream.
- Eyewash unit.

The local concentration of material, quantity and conditions of use determine the type of personal protective equipment required.

Use appropriate NIOSH-certified respirator based on informed professional judgement. In conditions where no reasonable estimate of exposure can be made, assume the exposure is in a concentration IDLH and use NIOSH-certified full face pressure demand SCBA with a minimum service life of 30 minutes, or a combination full facepiece pressure demand SAR with auxiliary self-contained air supply. Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

ENGINEERING CONTROLS

- General exhaust is adequate under normal operating conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is essential to obtain adequate protection. Provide adequate ventilation in warehouse or closed storage areas.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL PROPERTIES

Liquid.

Does not mix with water.

Floats on water.

State	Liquid	Molecular Weight	Not Applicable
Melting Range (°C)	Not Available	Viscosity	Not Available
Boiling Range (°C)	120	Solubility in water (g/L)	Immiscible
Flash Point (°C)	>200	pH (1% solution)	Not Available
Decomposition Temp (°C)	Not Available	pH (as supplied)	7
Autoignition Temp (°C)	Not Available	Vapour Pressure (kPa)	Not Available
Upper Explosive Limit (%)	Not Available	Specific Gravity (water=1)	0.99
Lower Explosive Limit (%)	Not Available	Relative Vapour Density (air=1)	Not Available
Volatile Component (%vol)	Not Available	Evaporation Rate	Not Available

APPEARANCE

Dark brown liquid; does not mix with water.

continued...

POLY-DRILL ENVIROGREASE

Chemwatch Material Safety Data Sheet
Review Date: 24-Sep-2008
NA517EC

CHEMWATCH 16-8178
Version No:2.0
CD 2010/1 Page 9 of 10

Section 10 - CHEMICAL STABILITY AND REACTIVITY INFORMATION

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

STORAGE INCOMPATIBILITY

- Avoid contamination of water, foodstuffs, feed or seed.
- Avoid reaction with oxidising agents.

For incompatible materials - refer to Section 7 - Handling and Storage.

Section 11 - TOXICOLOGICAL INFORMATION

Poly-Drill EnviroGrease

TOXICITY AND IRRITATION

- Not available. Refer to individual constituents.

Section 12 - ECOLOGICAL INFORMATION

Refer to data for ingredients, which follows:

POLY-DRILL ENVIROGREASE:

- DO NOT discharge into sewer or waterways.

May be harmful to fauna if not disposed of according to Section 13 and legislative requirements. [AMC]

Section 13 - DISPOSAL CONSIDERATIONS

Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations.

- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Authority for disposal.
- Bury or incinerate residue at an approved site.
- Recycle containers if possible, or dispose of in an authorised landfill.

Section 14 - TRANSPORTATION INFORMATION

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: TDG, IATA, IMDG

Section 15 - REGULATORY INFORMATION

REGULATIONS

Regulations for ingredients

continued...

POLY-DRILL ENVIROGREASE

Chemwatch Material Safety Data Sheet

Review Date: 24-Sep-2008

NA517EC

CHEMWATCH 16-8178

Version No:2.0

CD 2010/1 Page 10 of 10

Section 15 - REGULATORY INFORMATION

vegetable oils (CAS: 68956-68-3) is found on the following regulatory lists;

"Canada - Quebec Permissible Exposure Values for Airborne Contaminants (English)", "Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances", "Canada Domestic Substances List (DSL)", "OECD Representative List of High Production Volume (HPV) Chemicals"

No data for Poly-Drill EnviroGrease (CW: 16-8178)

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.

Section 16 - OTHER INFORMATION

■ Classification of the mixture and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references. A list of reference resources used to assist the committee may be found at:
www.chemwatch.net/references.

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

■ For detailed advice on Personal Protective Equipment, refer to the following Canadian Standards:

CAN/CSA-Z195 - Protective Footwear

Z195.1 - Guideline on Selection, Use, and Care of Protective Footwear

CAN/CSA-Z94.3 - Industrial Eye and Face Protectors

Z94.3.1 - Protective Eyewear User's Guide

CSA-Z94.4 - Selection, Use, and Care of Respirators

CAN/CSA-Z180.1 - Compressed Breathing Air and Systems.

This document is copyright. Apart from any fair dealing for the purposes of private study, research, review or criticism, as permitted under the Copyright Act, no part may be reproduced by any process without written permission from CHEMWATCH. TEL (+61 3) 9572 4700.

Issue Date: 24-Sep-2008

Review Date: 24-Sep-2008

Print Date: 15-Feb-2010