AGWAY Material Safety Data Sheet

Agway Petroleum Corporation, PO Box 4852, Syracuse, NY 13221

DATE ISSUED: 2/1/96

TABLE OF CONTENTS

- IDENTIFICATION AND EMERGENCY INFORMATION
 SUMMARY OF HAZARDS
- 3. EMERGENCY FIRST AID PROCEDURES
- 4. FIRE AND EXPLOSION
 5. HEALTH HAZARDS
- 6. PHYSICAL AND CHEMICAL DATA
- 7. PROTECTION AND PRECAUTIONS
- 8. TRANSPORTATION AND OSHA RELATED LABEL INFORMATION
- 9. ENVIRONMENTAL INFORMATION.

I. IDENTIFICATION AND EMERGENC	CY INFORMATION Back To Table Of Contents
PRODUCT NAME	CAS NUMBER
GASOLINE (ALL GRADES)	86290-81-5
OTHER NAMES	
Regular/Plus/Premium Unleaded (Convention	al, Oxygenated and Reformulated)
FORMULA	
Petroleum Distillate Mixture - 100% - See Sec	ction II, Below
PRODUCT APPEARANCE AND ODOR	
Light Yellow or Clear Liquid, Gasoline Odor	·
CLASSIFICATION	
Flammable Liquid & Vapor: UN1203 Packing	Group: II
DOT Hazard Class, 3	,
DISTRIBUTOR	·
Agway Petroleum Corporation	
PO Box 4852	
Syracuse, NY 13221	

PRODUCT INFORMATION

315-449-6363

EMERGENCY PHONE NUMBER

Chemtrec: 800-424-9300

IL SUMMARY OF HAZARDS	Back To Table Of Contents	
COMPONENTS	CAS NUMBER	CONCENTRATION
Petroleum Distillate Mixture	8002-05-09	89-98%
Benzene	71-43-2	0.1-5%
Ethyl Benzene	100-41-4	0-5%
Toluene	108-88-3	0-25%
1,2,4 Trimethyl Benzene	95-63-6	0-5%
Xylene	1330-20-7	0-25%
Methyl Tertiary Butyl Ether	1634-04-4	0-15%

HAZARDOUS MATERIALS IDENTIFICATION SYSTEM (HMIS)

Health 20 - Minimal 3 - Serious

Flammability 3 1 - Slight 4 - Severe

Reactivity 0 2 - Moderate

OCCUPATIONAL EXPOSURE LIMITS*

	OSHAL PEL ACGIH TLV		OSHA STEL		
Petroleum			1		
Distillate Mixture	300 ppm	300 ppm	500 ppm		
Benzene					
Ethyl Benzene	1 ppm	10 ppm			
	100 ppm	100 ppm ,	125 ppm		
1,2,4 Trimethyl Benzene	25 ppm	25 ppm			
Xylene	100 ppm	100 ppm	150 ppm		

Methyl Tertiary n/a n/a **Butyl Ether** * 8-Hour Time Weighted Average Unless Otherwise Specified. IIL EMERGENCY FIRST AID PROCEDURES Back To Table Of Cortents INHALATION Remove affected person from source of exposure. If not breathing, ensure clear airway and institute cardiopulmonary resuscitation (CPR). If breathing is difficult, administer oxygen if available. Get medical attention. EYE CONTACT Flush immediately with large amounts of water. Byelids should be held away from the eyeball to ensure thorough missing. Get medical attention if irritation persists. SKIN Remove contaminated clothing immediately. Wash area of contact throughly with soap and water. Get medical attention if irritation persists, High pressure skin injections are SERIOUS MEDICAL EMERGENCIES. Get immediate medical attention. INGESTION DO NOT INDUCE VOMITING BECAUSE OF DANGER OF ASPIRATING LIQUIDS INTO LUNGS. Get immediate medical attention. If spontaneous vomiting occurs, monitor for breathing difficulty. IV. FIRE AND EXPLOSION Back To Table Of Contact FLASH POINT AUTOIGNITION TEMPERATURE 650 F -45 F FLAMMABLE LIMITS IN AIR (% BY VOL.) Lower: 1.4 Upper: 7.6 BASIC FIREFIGHTING PROCEDURES Use dry chemical, foam or carbon dioxide to extinguish fire. Water may be ineffective as an extinguishing medium, but may be used to cool fire-exposed containers, structures and to protect personnel. If leak or spill has not ignited, ventilate area and use water spray to disperse gas or vapor and to protect personnel attempting to stop leak. Use water to flush spills away from sources of ignition. DO NOT FLUSH DOWN PUBLIC SEWERS OR OTHER DRAINAGE SYSTEMS. Exposed firefighters should wear MSHA/NIOSH approved self-contained breathing apparatus with full face mask and full protective equipment.

FIRE AND EXPLOSION HAZARDS

Dangerous when exposed to heat or flame. Runoff to sewer may cause fire or explosion hazard. Containers may explode in heat of fire. Irritating or toxic substances may be emitted upon thermal decomposition.

SPECIAL FIRE HAZARDS

Vapors are heavier than air & may travel along ground and be ignited by heat, pilot lights and other ignition sources.				
V. HEALTH HAZARDS				
INHALATION	PRIMARY ROUTE			
Vapors or mist may cause irritation of the nose and throat, headache, nausea, vomiting, dizziness, drowsiness, euphoria, loss of coordination, and disorientation. Chronic exposure may also cause anemia, decreased white blood cell counts, decreased platelets, aplastic anemia, leukemia and irregular heart rhythm. In poorly ventilated areas or confined spaces, unconsciousness and asphyxiation may result. The target organ is the central nervous system.	Yes			
EYE CONTACT				
May cause irritation, experiences as mild discomfort and seen as slight excess redness of the eye.	Yes			
SKIN IRRITATION				
Prolonged or widespread skin contact may result in the absorption of potentially harmful amounts of material. Can irritate dematitis.	Yes			
INGESTION				
Slightly toxic to internal organs if swallowed. Abdominal discomfort, nausea and diarrhea may occur. Aspiration may occur during swallowing or vomiting resulting in lung damage. The target organ is the central nervous system.	N/A			
V. HEALTH HAZARDS (Cont'd) Back to Table Of Contents:				
SENSITIZATION PROPERTIES				
Unknown	t.			
CHRONIC				
Studies sponsored by API, NIOSH and others have shown benzene (a component of gasoline) should be regarded as a potential occupational carcinogen, based on findings of carcinogenic responses in laboratory animals exposed to this substance. The excess cancer risk for workers exposed to this substance has not been calculated; the probability of developing cancer should be decreased by minimizing exposure to the lowest feasible limits.				
Personnel with pre-existing skin disorders, impaired liver or kidney function, central nervous system or chronic respiratory diseases should avoid exposure to this				

material.						
OTHER REMARKS						
This product contains benzene. Prolonged and repeated exposure to benzene has been associated with anemia and leukemia in humans.						
VL PHYSICAL AND CHEMICAL DATA	Back To Table Of Contrate					
The following data are approximate or typical	values and should not be used for precise désign purposes.					
BOILING RANGE (760 mmHg) 95F	MELTING POINT					
·	N.A.					
SPECIFIC GRAVITY (H ₂ 0 = 1)	EVAPORATION RATE (ETHER=1)					
.75	0.04					
VAPOR PRESSURE (mmHG @68)	VAPOR DENSITY (Air = 1)					
5	3-4					
SOLUBILITY IN WATER -	% VOLATILE BY VOLUME					
Insoluble	100					
рН	VISCOSITY (METHOD, TEMP)					
N/A	N/A					
STABILITY	HAZARDOUS POLYMERIZATION					
Stable	Will not Occur					
APPEARANCE AND ODOR						
Light Yellow or Clear Liquid, Gasoline Odor.						
CONDITIONS TO AVOID						
Strong oxidizing agents, heat, spark, flame and build-up of static electricity.						
HAZARDOUS DECOMPOSITION PRODUCTS						
Carbon monoxide, carbon dioxide and hydrocarbons						

VIL PROTECTION AND PRECAUTIONS

Back To Table Of Contents

HANDLING

Eye Protection: Remove contact lenses and wear chemical safety glasses, goggles or face shield where contact with liquid or mist may occur.

Skin Protection: Wear impervious gloves, clothing and boots when contact with skin may occur. Wash with soap and water before eating, drinking and smoking. Launder contaminated clothing before reuse.

Inhalation: Use approved respiratory protective equipment for cleaning large spills or entry into large tanks, vessels and other confined spaces, or in any situation where airborne concentrations may exceed occupational exposure limits.

Ventilation: Provide adequate general and local exhaust ventilation: (1) to meet occupational exposure limits, (2) to prevent the formation of explosive atmospheres and (3) to prevent oxygen deficient atmospheres, especially in confined spaces.

STORAGE

Store in closed containers in cool, dry, isolated, well-ventilated area away from heat, sources of ignition and incompatibilities. Use non-sparking tools. Ground lines and equipment used during transfer to reduce the possibility of static spark-initiated fire or explosion. Container may pressurize if exposed to heat.

EMPTY CONTAINERS

Empty containers likely contain toxic, flammable/combustible or explosive residue or vapors. Do not cut, grind, drill, weld, reuse or dispose containers unless adequate precautions (including repeated flushing of containers) are taken against these bazards.

VIIL TRANSPORTATION AND OSHA RELATED LABEL INFORMATION

Bard, To Table: Of Contrata

TRANSPORTATION INCIDENT INFORMATION

For further information relative to spills resulting from transportation incidents, refer to latest Department of Transportation Emergency Response Guidebook for Hazardous Materials Incidents, DOT P 5800.3.

DOT IDENTIFICATION NUMBER

Gasoline UN 1203 DOT Hazard Class 3/Packing Group II

OSHA REQUIRED LABEL INFORMATION

The following Hazard warning should be found on a label, bill of lading or invoice accompanying this shipment:

DANGER!

HIGHLY FLAMMABLE

DO NOT INHALE VAPORS OR FUMES

MAY BE HARMFUL IF ABSORBED THROUGH SKIN

MAY CAUSE DIZZINESS AND DROWSINESS

HARMFUL OR FATAL IF SWALLOWED - CAN ENTER LUNGS AND CAUSE DAMAGE

USE ONLY AS FUEL

ATTENTION! POSSIBLE CANCER HAZARD

CONTAINS BENZENE WHICH MAY CAUSE CANCER BASED ON ANIMAL DATA

IX. ENVIRO	NMENTAL INFORMA	TION Back To Table Of Cook	orts .					
EPA INFORMATION FOR HAZARDOUS CHEMICAL REPORTING								
EPA HAZAF	EPA HAZARD CLASSIFICATION CODE							
Acute	Chronic Hazard	Fire Hazard	Pressure Hazard	Reactive Hazard				
Hazard	xxx	XXX						
XXX								
REPORTAB	LE QUANTITY (RQ), E	PA REGULATION 40 C	FR 302 (CERCLA Section	102)				
THRESHOL	D PLANNING QUANTI	TY (TPQ), EPA REGUL	ATION 40 CFR 355 (SAR	A Sections 301-304)				
TOXIC CHE	MICAL RELEASE REP	ORTING, EPA REGULA	TION 40 CFR 372 (SAR.	A Section 313)				
COMPONEN	TS	CAS NUMBER	CONCENTRATION					
Petroleum Distillate Mixture		8002-05-09	89-98%					
Benzene		71-43-2	0.1-5%					
Ethyl Benzene		100-41-4	0-5%					
Toluene 108-88-3 0-25%								
1,2,4 Trimethyl Benzene		95-63-6	0-5%					
Xylene		1330-20-7 0-25%						
Methyl Tertiary	Butyl Ether	1634-04-4	0-15%					

PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED

Report spills as required to appropriate authorities. U.S. Coast Guard regulations require immediate reporting of spills that could reach any waterway including intermittent dry creeks. Report spill to Coast Guard toll free number (800) 424-8802.

In case of accident or road spill notify Chemtrec (800) 424-9300.

IF MATERIAL IS RELEASED OR SPILLED, absorb on fire retardant treated sawdust, diatomaceous earth, etc. Shovel up and dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations, and product characteristics at time of disposal.

ENVIRONMENTAL PRECAUTIONS: Prevent spills from entering storm sewers or drains and contact with soil.

WASTE DISPOSAL METHODS

Dispose through a licensed waste disposal company. Follow federal, state and local regulations.

"EMPTY" CONTAINER WARNING

<u>Do not</u> pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity or other sources of ignition.

The information and recommendations contained herein are a compilation of data provided by various suppliers and, to the best of Agway Petroleum Corporation's (APC) knowledge and belief, accurate and reliable as of the date issued. APC does not warrant or guarantee their accuracy or reliability, and APC shall not be liable for any loss or damage arising out of the use thereof. The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. If buyer repackages this product, legal counsel should be consulted to insure proper health, safety, and other necessary information is included on the container.

The Environmental Information included under Section IX hereof as well as the Hazardous Materials Identification System (HMIS) and National Fire Protection Association (NFPA) ratings have been included by APC in order to provide additional help and hazard classification information. The ratings recommended are based upon the criteria supplied by the developers of these rating systems, together with APC's interpretation of the available data.

MSDS Canadian Centre for Occupational Health and Safety * * * * * * * * * * * * * * Issue : 94-4 (November, 1994) * *** IDENTIFICATION *** ISDS RECORD NUMBER 265686 : Motor Oil 10W30 'RODUCT NAME(S) ATE OF MSDS : 1988-05 *** MANUFACTURER INFORMATION *** IANUFACTURER : Recochem Inc : 850 Montee de Liesse DDRESS Montreal Quebec Canada H4T 1P4 Telephone: 514-341-3550 *** SUPPLIER/DISTRIBUTOR INFORMATION *** UPPLIER/DISTRIBUTOR : Recochem Inc : 850 Montee de Liesse DDRESS Montreal Quebec H4T 1P4 Canada Telephone: 514-341-3550 *** MATERIAL SAFETY DATA *** BULLETIN DE SECURITE DU MATERIEL MATERIAL SAFETY DATA SHEET SECTION I - NOM ET PRODUIT - NAME AND PRODUCT omplete par - Completed by R. Hill May 1988 om du produit - Trade name Motor Dil 10W30 ynonymes - Synonyms Petroleum Oil C.A.S. Registry #64742-50-3 SECTION II - COMPOSES DANGEREUX ET PROPRIETES PHYSIQUES - HAZARDOUS INGREDIENTS AND PHYSICAL PROPERTIES ________ TLV, LD50 NGREDIENTS DANGEREUX AZARDOUS INGREDIENTS (units) ot applicable oint d'ebullition: Not determined oiling point: oint de Fusion: Not determined elting Point: oids specifique (H20=1): pecific gravity (H20=1): 0.873 at 60 deg F

```
Volatil par volume:
 Volatile by volume:

    Not determined

ension de vapeur (mm de Hg):
apor pressure (mm of Hg):
                             Not determined
olubilite dans l'eau (%):
olubility in water (%):
                             Insoluble
itesse d'evaporation ( =1):
vaporation rate ( =1):
                             <1
ensite de vapeur (air=1):
apor density (air=1)
                             Not determined
emarques - Remarks
                             Apparence et odeur - Appearance and odor
dour threshold not determined
                             Clear amber liquid
H not applicable
                             Characteristic Petroleum odour
ensity not applicable
istibution coefficient
il/water not determined
SECTION III - FEU ET EXPLOSION - FIRE AND EXPLOSION DATA
pint eclair et methode - Flash point and method
 370 deg F minimum C.O.C.
imites d'inflammabilite - Flammable limits (STP - % vol)
 Not determined
 Inferieure - lower
                        Superieure - higher
emperature
                    Materiel extincteur - Extinguishing media
utoignition
                    CO2 dry chemical, foam, water fog
ot determined
echniques speciales pour combattre le feu - Special fire fighting procedures
 Handle as petroleum fire. Avoid smoke inhalation
isques d'explosion - Explosion Hazards
None.
Explosion data sensitivity to mechanical impact: None
Sensitivity to static discharge: Low
lammability Classification
None
SECTION IV - REACTIONS - REACTIVITY DATA
tabilite - Stability (etat normal - normal conditions)
 Stable [X] Instable [ ]
tats a eviter - Conditions to avoid
 None.
ncompatibilite - Incompatibility (materiaux a eviter - Materials to avoid)
1 H2O [ ] Acide - Acid [ ] Base - Base [ ] Corrosif - Corrosive
] Materiel oxydant - Oxydant material
                                       [ ] Autres - Others
ot Applicable
roduits de decomposition dangereux - Dangerous decomposition products
 Carbon Monoxide
olymerisation dangereuse - Dangerous polymerization
 Peut se produire - May occur ·
Ne se produira pas - Will not occur
```

tats a eviter - Conditions to avoid Not applicable SECTION V - PRECAUTIONS - REQUIREMENTS intreposage - Storing: Manutention - Handling: Store in cool dry area No special handling procedure required fateriel de protection individuelle - Specific personal protective equipment /etements - Clothing: Systeme de respiration - Respiration devices: lot required Not required Ventilation - Ventilation requirements Normal ventilation adequate farche a suivre en cas de fuite/renversement - Steps to take if spilled/leaked Clean up with absorbent material. Elimination des dechets - Waste disposal Dispose of in accordance with municipal regulation. SECTION VI - DOMMAGES OCCASIONNES A LA SANTE - HEALTH HAZARD INFORMATION Voies d'exposition - Routes of exposure Inhalation - Inhalation: Not hazardous Contact epidermique - Skin contact: Not hazardous Absorption cutanee - Skin absorption: Not hazardous Contact oculaire - Eye contact: May cause irritation Ingestion - Ingestion: Not determined iffets de la surexposition Not determined - Effects of over-exposure: Cas d'urgence et premiers soins - Emergency and first-aid 'eux - Eyes: Flush with running water for at least 15 minutes 'eau - Skin: Wash with soap and water nhalation - Inhalation: Remove to fresh air Ingestion - Ingestion: Call a doctor immediately Proprietes Toxicologiques - Toxicological Properties MOTOR DIL 10W30 - TLV 5 mg/m3 Exposure Limits - Not determined Irritancy of product

- Sensitization to product
- Carcinogenicity
- Reproductive toxicity
- Teratogenicity
- Mutagenicity
- Name of toxicologically synergistic products

- Not determined
- Not considered a carcinogen
 - (NTP.) (IARC)
- Not determined
- Not determined
- Not determined
- None

Special Shipping Information - None Source: Breslube Material Safety Data Sheet

RECOCHEM INC A. HILL

)ATE: 1988-05

MATERIAL SAFETY DATA SHEET

Merck	
Manufacturer	
Quinton Instrument Co. Distributor	
3303 Monte Villa Parkway	
Bothell, WA 98021	
(425) 402-2000	
Phone Number (For Information)	

Calcium Chloride	
Identity (Trade Name As Used On Label)	
CHEMTREK (800) 424-9300	
Emergency Phone Number J892401	Telex
MSDS Number*	
10043-52-4	
CAS Number	
04/09/98	
Dalle Prepared	

Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Michele Bluemer Prepared By*

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS - Chemical Name & Common Names (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	%*	OSHA PBL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Calcium Chloride, 10043-52-4	100	Not Established	Not Established	·
	-			,
Non-Hazardous Ingredients				
TOTAL	100			

SECTION 2 - PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point	2912°F	Specific Gravity (H ₂ O = 1)	2.15	+
Vapor Pressure (mm Hg and Temperatur	NA (c)	Melting Point	1431°F	
Vapor Density (Air=1)	NA .	Evaporation Rate	NA -1)	
Solubility in Water	74.5%	Water Reactive	No	
Appearance and Odor	White, solid crystals			

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

Flash Point and Method Used	Unknown	Auto-Ignition Temperature	Flammability Limits in Air % by Volume	LBL	UEL
Extinguisher Media	Negligible	fire hazard when exposed to hea	et or flame		
Special Fire Fighting Procedures		ainers from fire area if you can v flame until after fire is out.	without risk. Apply cooling water to sid	les of contain	ers that are

Unusual Fire and Explosion Hazard Data Do not use water directly on material. Avoid breathing corrosive vapors; keep upwind.

STABILITY	Conditions	Anhydrous	form reacts ex	othermically with w	ater.	
✓Stable Unstable	To Avoid	3775440404		•		
Incompatability		Calcium Oxide, B	romine Triflu	oride, Furan-2-Perox	yearboxylic Acid, Metals, M	Methyl Vinyl Ether
(Materials to Avoid) Hazardous	Zinc.	a) danaaaaaaa'a'aa	desete man			
Decomposition Product		at decomposition	products may	merude toxic and cor	crosive fumes of chlorine.	
HAZARDOUS POLYA		C	onditions 1	Not Applicable		
May Occur	201000111011		Avoid	- Aller - Alle		
Will Not Occur				31-2-2-11		
SECTION 5 - HEAL	TH HAZARD	DATA				
PRIMARY ROUTES	✓ Inhalation	4/ Inc	restion	CARCINOGERN	NTP	OCITA
OF ENTRY	✓ Skin Contac	LIMITE THE PROPERTY OF THE PARTY OF THE PART	t Hazardous	LISTED IN	IARC Monograph	OSHA Not Listed
HEALTH HAZARDS					evere irritation, erythema, d	
					erdose may cause gastroime	
		cardiovascular irre				
Signs and Symptoms					ensation & pain in the nasal	
of Exposure		occassional nose b	leeds, & tickl	ng in the throat. Ski	n-Blistering, exfoliation, ale	ceration, necrosis
Medical Conditions		None specified by		i. Ingestion-May ca	use abdominal spasms and	nausea.
Generally Aggravated by		vone specifica by	manutacinici			
		ES - Seek medical	assistance for	further treatment, o	bservation and support if no	cessary
Bye Contact Wash is	nmediately with	large amounts of	vater or norm:	al saline for at least 1	5 minutes.	
	contaminated cl	othing. Wash are	a with soan or	mild detergent & lar	ge amounts of water.	
Inhalation Remove rest.	e from exposure i	o iresh air immed	atery. If brea	ning has stoped, pre	form artificial respiration. K	ecp warm and at
	ing occurs keep h	ead lower than hip	s. Get medic	al attention.		
SECTION 6 - CONTR	OL AND PRO	TECTIVE ME.	ASURES			
Respiratory Protection (Specify Type)	The specific res	spirator selected m	ust be based o	n contamination lev	els found in the work place.	
Protective Gloves	Wear appropria	te protective glov	es. Eye	Protection	Wear splash prove and d	ust resistant
Ventikation To Be Used	Local Exhau	ust 🗸	Mechanical	(General)	Special	
	Other (Spec	ify)				
Other Protective	Wear approp	priate protective e	quipment and	clothing to prevent s	kin contact.	
Clothing and Equipment	1000 074.50 0					
Hygienic Work Practice	Should prov	ride an eye wash f	ountain and qu	ick drench shower w	rithin the immediate work as	rea.
ECTION 7 - PRECAU	TIONS FOR S	SAFE HANDLI	NG AND U	SE/LEAK PROC	CEDURES	
D	2.3					
Steps to be Taken If Mater is Spilled Or Released	ial					
Waste Disposal						
Methods						,
Precautions to be Taken In Handling and Storage						
of Handling and Storage Other Precautions and/or						
Special Hazards	2 1929	94.41.00m,00.00. • 0.00				
		200174				
IFPA ating* Health Flame	ability Reacti	vity Special	HMIS Rating*	Health Flammab	ility Reactivity Perso	onal Protection
Rating* Health Flamu					THE PLEASE OF THE PROPERTY OF	man reviewou t



Poly-Drill Drilling Systems

1824 - 104 Avenue, S.W. Calgary, Alberta, Canada

T2W-OA8

(403) 259-5112 FAX (403) 255-7185

Section 1—PRODUCT IDENTIFICATION

PRODUCT TRADE NAME(S): Poly Drill 133X/1330

PRODUCT DESCRIPTION: Latex

polyelectrolyte

SECTION 2—COMPOSITION

A liquid cationic polymer: Evaluation of the ingredient(s) has found no ingredient(s) hazardous as per WHMIS regulations.

SECTION 3—PHYSICAL DATA

Boiling Point: Not available

Solubility in Water: Solubility limited by solution viscosity.

Density (g/ml): 1.08 at 25 C

Appearance and Odor: Blue. Odor slight.

Specific Gravity (@ 25 Deg.C.): 1.09

pH: 8.1 (1.0% solution) Physical State: Liquid

SECTION 4-FIRE AND EXPLOSION DATA

Flash Point (method used): (PMCC) >100 C

Conditions of flammability: Intense heat, open flame.

Hazardous combustion products: Products of incomplete hydrocarbon combustion.

Upper and Lower flammable limits: Not available

Extinguishing media: Use water spray, foam, dry chemical, or carbon dioxide.

SECTION 5—REACTIVITY

Chemical stability: Stable under normal conditions.

Hazardous Polymerization: Will not occur

Incompatible substances: Avoid strong oxidizing and reducing agents.

Hazardous decomposition products: Carbon monoxide, carbon dioxide, and products of incomplete hydrocarbon combustion.

SECTION 6—HEALTH HAZARD DATA

TOXICITY RATING: Practically non-harmful.

Routes of Exposure and Effects:

SKIN: Slight irritant: prolonged contact may cause skin irritation or dematitis in some individuals

EYE: No effects of exposure expected with the exception of possible irritation.

INHALATION: If misted, no effects of exposure are expected.

Exposure limits: TLV-TWA: Mineral oil, mist 5 mg/m3

Carcinogenicity: None of the components of this product are listed as carcinogens by IARC and ACGIH

Sensitization of product: Not suspected to be a sensitizer.

Teratongenicity: Not available. Mutagenicity: Not available.

SECTION 7—EMERGENCY AND FIRST AID PROCEDURES

SKIN: Wash exposed area with soap and water. If irritation or abnormalities persist, call a physician.

EYE: Immediately flush eyes with water for 15 minutes, if irritation or abnormalities persist, call a physician.

INHALATION: Remove to fresh air. If breathing becomes difficult, give oxygen and call a physician.

INGESTION: Don not induce vomiting: Call a physician immediately.

SECTION 8—HANDLING AND USE PRECTIONS

Storage requirements: keep container closed when no in use. Store in a cool dry location away from exidizing and reducing agents.

Waste Disposal: product should be disposed of in accordance with applicable local, Provincial and Federal regulations. Steps must be taken if product is released or spilled: clean spill areas thoroughly to avoid hazardous slippery conditions.

SECTION 9-INDUSTRIAL HYGIENE CONTROL MEASURES

Respiratory Protection: None normally required.

Ventilation: If mist and/or vapors are present, use air purifying respirator of self-contained breathing apparatus, but this is

rarely required.

Eye Protection: Safety glasses, if personally preferred Gloves: Generally not necessary. Personal preference.

SECTION 10-TOXICOLOGICAL PROPERTIES

Environmental Effects: Not known to be harmful to aquatic life at low concentrations.

Freshwater aquatic toxicity rating: 96 hour LC50 Rainbow Trout = 160 mg/L

96 hour LC50 Salmon = 160 mg/L

SECTION 11—DEPARTMENT OF TRANSPORTATION INFORMATION

Shipping Name: Drilling Mud Hazard Class: Not hazardous Hazardous Substances: None

Cautionary Labeling: None required



Poly-Drill Drilling Systems

1824 - 104 Avenue, S.W. Calgary, Alberta, Canada T2W-OA8

(403) 259-5112 FAX (403) 255-7185

Section 1—PRODUCT IDENTIFICATION

PRODUCT TRADE NAME(S): Poly Drill CLAY TREAT II

SECTION 2—COMPOSITION

SECTION 3-PHYSICAL DATA

Boiling Point: 100 € Solubility in Water: Soluble

Density (g/ml): 1.1

Appearance and Odor: Red. Characteristic slight odor.

Specific Gravity (@ 25 Deg.C.): 1.09

pH: 5.0 - 7.0 (1.0% solution) Physical State: Liquid

SECTION 4-FIRE AND EXPLOSION DATA

Flash Point: >93.3 C

Conditions of flammability: Will burn after drying

Hazardous combustion products: Oxides of carbon and nitrogen and products of incomplete combustion.

Upper and Lower flammable limits: Not available

Extinguishing media: Use water spray, foam, dry chemical, or carbon dioxide.

SECTION 5—REACTIVITY

Chemical stability: Stable under normal conditions.

Hazardous Polymerization: Will not occur.

Incompatible substances: Avoid strong oxidizing and reducing agents.

Hazardous decomposition products: Not available.

SECTION 6-HEALTH HAZARD DATA

TOXICITY RATING: Practically non-harmful.

Routes of Exposure and Effects:

SKIN: Slight irritant: prolonged contact may cause skin irritation or dermatitis in some individuals

EYE: No effects of exposure expected with the exception of possible irritation.

INHALATION: If misted, no effects of exposure are expected.

Exposure limits: Contains trace acrylamide (SKIN). Exposure limit, TWAEV=0.03 mg/m(ONT, Reg. 654/86).

Contains traces of isopropanol. Exposure limit, TWAEV=400ppm, STEV=500ppm(ONT. Reg. 654/86).

Carcinogenicity: This product contains traces of acrylamide. Acrylamide is listed by IARC(Group 2B) and ACGIH(Group A2)

as a possible human carcinogen.

Teratongenicity: Not available. Mutagenicity: Not available.

SECTION 7-EMERGENCY AND FIRST AID PROCEDURES

SKIN: Wash exposed area with soap and water. If irritation or abnormalities persist, call a physician.

EYE: Immediately flush eyes with water for 15 minutes, if irritation or abnormalities persist, call a physician.

INHALATION: Remove to fresh air. If breathing becomes difficult, give exygen and call a physician.

INGESTION: Don not induce vomiting: Call a physician immediately.

SECTION 8—HANDLING AND USE PRECTIONS

Storage requirements: keep container closed when no in use. Store in a cool dry location away from oxidizing and reducing agents.

Waste Disposal: product should be disposed of in accordance with applicable local, Provincial and Federal regulations.

Steps must be taken if product is released or spilled: clean spill areas thoroughly to avoid hazardous slippery conditions.

SECTION 9—INDUSTRIAL HYGIENE CONTROL MEASURES

Respiratory Protection: None normally required.

Ventilation: If mist and/or vapors are present, use air purifying respirator of self-contained breathing apparatus, but this is

rarely required.

Eye Protection: Safety glasses, if personally preferred Gloves: Generally not necessary. Personal preference.

SECTION 11-DEPARTMENT OF TRANSPORTATION INFORMATION

Shipping Name: Drilling Mud Hazard Class: Not hazardous Hazardous Substances: None

Cautionary Labeling: None required



Poly-Drill Drilling Systems

1824 - 104 Avenue, S.W. Calgary, Alberta, Canada T2W-OA8 (403) 259-5112 FAX (403) 255-7185



Section 1-PRODUCT IDENTIFICATION

PRODUCT TRADE NAME(S): Poly Drill O.B.X.

TDG Classification: Non dangerous goods

WHMIS CLASSIFICATION: Non-regulated

SECTION 2—COMPOSITION

A liquid polymer: Evaluation of the ingredient(s) has found no ingredient(s) hazardous as per WHMIS regulations.

SECTION 3—PHYSICAL DATA

Boiling Point: Not available

Solubility in Water: disperses in water(forms viscous, slippery solution). pH: 3.8 (1% concentration)

Density (g/ml): Not available

Appearance and Odor: Brown. Odor slight.

Specific Gravity: 0.9 g/cm

pH: 3.8 (1% concentration)
Physical State: Liquid

SECTION 4-FIRE AND EXPLOSION DATA

Flash Point (method used): (PMCC) greater than 100 C.

Conditions of flammability: Very low risk.

Hazardous combustion products: None known.

Upper and Lower flammable limits: Not available.

Extinguishing media: Carbon dioxide, dry chemicals, foam, in preference to water spray

SECTION 5—REACTIVITY

Chemical stability: Stable under normal conditions.

Hazardous Polymerization: Will not occur.

Incompatible substances: Avoid strong oxidants such as liquid chlorine, concentrated oxygen, sodium or calcium hypochloride.

Hazardous decomposition products: None known

SECTION 6-HEALTH HAZARD DATA

TOXICITY RATING: Practically non-harmful.

Routes of Exposure and Effects:

SKIN: Slight irritant: prolonged contact may cause skin irritation or dermatitis in some individuals

EYE: No effects of exposure expected with the exception of possible irritation.

INHALATION: Due to low volatility of mineral distillates a small inhalation hazard exists.

INGESTION: can cause nausea, vomiting, cramps, diarrhea

Chronic exposure limits: None

Sensitization of product: Not suspected to be a sensitizer.

Teratongenicity: Not available. Mutagenicity: Not available.

Carcinogenicity: None of the components of this product are listed as carcinogens by IARC and ACGIH

SECTION 7-EMERGENCY AND FIRST AID PROCEDURES

SKIN: Wash exposed area with soap and water. If irritation or abnormalities persist, call a physician.

EYE: Immediately flush eyes with water for 15 minutes, if irritation or abnormalities persist, call a physician.

INHALATION: Remove to fresh air. If breathing becomes difficult, give oxygen and call a physician.

INGESTION: Don not induce vomiting: Call a physician immediately.

SECTION 8—HANDLING AND USE PRECTIONS

Storage requirements: keep container closed when not in use. Store in a cool dry location away from oxidizing and reducing agents.

Waste Disposal: product should be disposed of in accordance with applicable local, Provincial and Federal regulations.

Steps must be taken if product is released or spilled: clean spill areas thoroughly to avoid hazardous slippery conditions.

SECTION 9—INDUSTRIAL HYGIENE CONTROL MEASURES

Respiratory Protection: None normally required.

Ventilation: If mist and/or vapors are present, use air purifying respirator of self-contained breathing apparatus, but this is

rarely required.

Eye Protection: Safety glasses, if personally preferred Gloves: Generally not necessary. Personal preference.

SECTION 10-TOXICOLOGICAL PROPERTIES

Environmental Effects: Not known to be harmful to aquatic life at low concentrations.

Freshwater aquatic toxicity rating: 96 hour LC50 Rainbow Trout = 160 mg/L

96 hour LC50 Salmon = 160 mg/L

SECTION 11—DEPARTMENT OF TRANSPORTATION INFORMATION

Shipping Name: Drilling Mud Hazard Class: Not hazardous Hazardous Substances: None Cautionary Labeling: None required