

WESTCOAST DRILLING SUPPLIES LTD.

8069 River Way, Delta, British Columbia,

Canada V4G 1L3

Ph. (604) 940-6050 Fax (604) 940-6080

EMERGENCY 1-800-665-6645

SECTION I: IDENTIFICATION OF PRODUCT

PRODUCT NAME: WDS-120L ✓

PRODUCT USE: Drilling Mud Additives

CHEMICAL FAMILY: Copolymer of acrylamide with sodium acrylate

WHMIS CLASSIFICATION: B3, D2B

WORK PLACE HAZARD: Combustible liquid, skin and eye irritant

TRANSPORTATION OF DANGEROUS GOODS

SHIPPING NAME: not regulated

CLASSIFICATION: not applicable

PACKAGE GROUP: not applicable

PRODUCT IDENTIFICATION NUMBER (Pin): not applicable

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT	PERCENT %	CAS NUMBER	LD ₅₀ (oral rat)	LD ₅₀ (dermal rabbit)	LC ₅₀ (inhalator rat)
Mineral Spirits	30-60	64742-47-8	>5 g/kg	>3 g/kg	not determined
Alkyl Phenol	3-7	68412-54-4	3000 mg/kg	2830 mg/kg	not determined
Ethoxylate					

SECTION III: TOXICOLOGICAL INFORMATION

CARINOGENICITY: not determined

REPRODUCTIVE TOXICITY: not determined

TERATOGENICITY: not determined

MUTAGENICITY: not determined

DEVELOPMENTAL TOXICITY: not determined

SECTION IV: HEALTH HAZARDS

ROUTE OF ENTRY: [XXX] Skin [XXX] Eye Contact [XXX] Inhalation [XXX] Ingestion

THRESHOLD LIMIT VALUE: : not determined

SKIN CONTACT: : Contact may cause irritation, redness, swelling or dermatitis

EYE CONTACT: : Will cause painful burning or stinging of eyes and lids, watering of eyes and inflammation of conjunctiva.

INGESTION: : May cause nausea and vomiting.

INHALATION: : Inhalation not likely.

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WDS-120L

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SECTION V: FIRST AID MEASURES**SKIN CONTACT**

: Wash exposed area with soap and water.

If irritation or abnormalities persist, call a physician.

EYE CONTACT

: Immediately flush eyes with water for 15 minutes and call a physician.

INGESTION

: Do not induce vomiting.

If conscious, dilute by giving two glasses of water.

Call a physician immediately.

INHALATION

: Remove to fresh air.

If conscious, dilute by giving two glasses of water.

Call a physician immediately.

SECTION VI: PHYSICAL DATA**APPEARANCE**

Off white liquid

ODOUR

Mineral oil smell

SPECIFIC GRAVITY

1.07

BOILING POINT (0C)

not determined

MELTING POINT (0C)

not determined

SOLUBILITY IN WATER

Soluble

PERCENT VOLATILE BY VOLUME

not determined

EVAPORATION RATE

not determined

VAPOR PRESSURE (mm Hg)

not determined

VAPOR DENSITY (Air = 1)

not determined

pH

6 - 9 (0.6% in water)

SECTION VII: FIRE AND EXPLOSION HAZARD DATA**FLASH POINT**

65°C (TCC)

FLAMMABLE LIMITS

not determined

EXTINGUISHING MEDIA

Water spray, foam, dry chemical, carbon dioxide

SPECIAL FIRE FIGHTING PROCEDURES

Self-contained respirators required for fire fighting personnel.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Water will cause extreme slipperiness.

Sensitivity to static charge.

WDS-120L

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SECTION VIII: REACTIVITY DATA

STABILITY:	<input checked="" type="checkbox"/> Stable	<input type="checkbox"/> Unstable
INCOMPATIBILITY (Conditions to Avoid)	Strong oxidizing and reducing agents.	
CONDITIONS OF REACTIVITY	Not known	
HAZARDOUS DECOMPOSITION PRODUCTS	CO _x , smoke on combustion	
HAZARDOUS POLYMERIZATION	<input checked="" type="checkbox"/> Will not occur	<input type="checkbox"/> Will occur

SECTION IX: PREVENTIVE MEASURES

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION	In the absence of proper ventilation a NIOSH approved organic vapour respirator is recommended
VENTILATION	General mechanical, 10 changes per hour
PROTECTIVE GLOVES	Chemically resistant
EYE PROTECTION	Safety glasses
OTHER PROTECTIVE EQUIPMENT (Specify)	None known

STEPS TO BE TAKEN IN CASE THE MATERIAL IS SPILLED OR RELEASED

(Use appropriate safety equipment.) Small spills, soak up with absorbent material
Large spills, dike to contain spill to prevent water pollution.
Recover diked material, return recovered material to plant.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Avoid ingestion.
Practice reasonable caution and personal cleanliness.
Avoid skin and eye contact.
Store in a cool well ventilated area.

WASTE DISPOSAL METHOD

Absorb spilled material with absorbent compound, incinerate/dispose to conform with local disposal regulations.

SECTION X: PREPARATION

The information contained herein is given in good faith, but no warranty, expressed or implied is made.

DATE ISSUED: July 2001
SUPERSEDES: January 1995
BY: Product Safety Committee

DATE REVISED: April 1, 2000
DATE REVISED: January 2002

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SECTION I: IDENTIFICATION OF PRODUCT

PRODUCT NAME: **BIG BEAR DIAMOND DRILL ROD GREASE**
CHEMICAL FAMILY: Hydrocarbon
WHMIS CLASSIFICATION: Not regulated
WORK PLACE HAZARD: Not applicable

TRANSPORTATION OF DANGEROUS GOODS (TDGR)

CLASSIFICATION: Not regulated
PACKAGE GROUP: Not applicable
PRODUCT IDENTIFICATION NUMBER (PIN): Not applicable

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT	PERCENTAGE	CAS NUMBER	LD50	LC50
Severely hydrotreated naphthenic oils	< 75.00%	64742-52-5	>3 g/kg (Dermal Rabbit) >5 g/kg (Oral Rat)	N/D
Barium soap	< 35.00%	68201-19-4	Not determined	

SECTION III: TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY:
[XXX] Skin, [] Eye Contact, [] Inhalation, [] Ingestion
SKIN CONTACT: Acute exposure is believed to be minimally irritating
EYE CONTACT: Acute exposure is believed to be minimally irritating.
INHALATION: Believed to be minimally irritating if not in excess of permissible concentrations; see Section VIII.
INGESTION: Not available
CHRONIC OVEREXPOSURE: Not determined
IRRITATION INDEX: SKIN: Believed to be 1.0 - 2.0/8.0 (Rabbit); slightly irritating
EYES: Believed to be <15/110 (Rabbit); no appreciable effect
SYMPTOMS OF EXPOSURE: None expected other than possible minor irritation. Considered practically non-toxic.

SECTION IV: FIRST AID MEASURES

SKIN CONTACT: None considered necessary.
EYE CONTACT: As with most foreign materials, should eye contact occur, flush eyes with plenty of water.
INHALATION: None considered necessary.
INGESTION: None considered necessary. Do not induce vomiting.
OTHER INSTRUCTIONS: In some cases of ingestion and/or inhalation, medical attention should be obtained.

SECTION V: PHYSICAL DATA

APPEARANCE AND ODOR: Brownish yellow, fibrous grease
DENSITY (SPECIFIC GRAVITY): >1.0
BOILING POINT: 700° F
MELTING POINT: 400° F
WATER SOLUBILITY: Negligible
% VOLATILE BY VOLUME: Not determined

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BIG BEAR DIAMOND DRILL ROD GREASE

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EVAPORATION RATE:	Not determined
VAPOR PRESSURE (mm Hg):	Not determined (low)
VAPOR DENSITY (Air =1):	>1.0
pH:	Not applicable
VISCOSITY:	NLGI No. 3-4 grease

SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	>350° F (COC Method)
FLAMMABLE LIMIT:	Not determined
EXTINGUISHING MEDIA:	According to the National Fire Protection Association Guide, use water spray. Dry chemical, Foam, Carbon Dioxide CO ₂ . Water or foam may cause frothing.
SPECIAL FIRE FIGHTING PROCEDURES:	Use water to cool fire-exposed containers. If a leak or spill has not ignited, use water spray to disperse the vapors and to provide protection for persons attempting to stop the leak. See Hazardous Decomposition Products, Section VII.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	None

SECTION VII: REACTIVITY DATA

STABLE [XXX] INSTABLE []	Info not available
INCOMPATIBILITY (CONDITIONS TO AVOID):	Strong oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS:	This material decomposes at a high temperature to form carbon monoxide, carbon dioxide, aldehydes and ketones, combustion products of nitrogen and sulphur.
HAZARDOUS POLYMERIZATION:	Will not occur [XXX] May occur []

SECTION VIII: PREVENTATIVE MEASURES

RESPIRATORY PROTECTION:	None required if exposures are within the permissible concentrations. See below
VENTILATION:	Natural dilution
PROTECTIVE GLOVES:	Neoprene
EYE PROTECTION:	Chemical type goggle or face shield optional
OTHER PROTECTIVE EQUIPMENT:	Standard work clothing and work shoes.
PERMISSIBLE CONCENTRATIONS: AIR:	5mg/cubic metre of air for mineral oil mist averaged over an 8 hour daily exposure (ACGIH 1986 - 87)

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Exposed persons should exercise reasonable personal cleanliness; this includes cleansing exposed skin areas several times daily with soap and water and laundering or dry cleaning soiled work clothing at least weekly. Minimum feasible handling temperatures should be maintained. Periods of exposure to high temperatures should be minimized. Water contamination should be avoided.

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BIG BEAR DIAMOND DRILL ROD GREASE

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STEPS TO BE TAKEN IN CASE OF SPILL OR LEAK:

Contain spill if possible. Wipe up or absorb on suitable material and shovel up.

WASTE DISPOSAL METHOD:

Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures and processes may influence waste classification. Disposal should be in accordance with applicable federal, provincial and local regulations.

SECTION IX: PREPARATION

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DATE ISSUED: September 17, 1993

DATE REVISED: April 1, 2000

BY: Product Safety Committee

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SECTION I: IDENTIFICATION OF PRODUCT

PRODUCT NAME: CAL-SEAL (EA-2)
CHEMICAL FAMILY: Calcium Sulphate
PRODUCT USE: Cementing
WHMIS CLASSIFICATION: Not a controlled product under WHMIS
WORK PLACE HAZARD: Not applicable

TRANSPORTATION OF DANGEROUS GOODS (TDGR)

CLASSIFICATION: Not Dangerous Goods
PACKAGE GROUP: Not applicable
PRODUCT IDENTIFICATION NUMBER (PIN): Not applicable

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT	PERCENTAGE	CAS NUMBER	LD50	LC50
Calcium Sulphate Hemihydrate	>60%	10124-36-4	Not determined	Not determined

SECTION III: TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY:

[XXX] Skin, [XXX] Eye Contact, [XXX] Inhalation, [XXX] Ingestion

SKIN CONTACT: May cause mild allergic skin reaction in susceptible individuals.
EYE CONTACT: Dust may irritate eyes
INHALATION: Dust may irritate upper respiratory passages,
INGESTION: Not available
EFFECTS OF CHRONIC EXPOSURE: Prolonged or repeated skin contact may cause severe irritation or burns especially if skin is moist or if material is confined.

SECTION IV: FIRST AID MEASURES

SKIN CONTACT: Immediately flush skin with water for at least fifteen (15) minutes. Remove contaminated clothing and footwear; wash before re-use. Seek medical attention. Wash dust if irritating to the eyes, skin and respiratory system.
EYE CONTACT: Immediately flush eyes with plenty of water for at least fifteen (15) minutes occasionally lifting the eyelids. Seek immediate medical attention.
INHALATION: Remove to fresh air. If not breathing, give artificial respiration, preferably mouth to mouth. If breathing is difficult, give oxygen. Get immediate medical attention.
INGESTION: If swallowed, *do not induce vomiting*. Give up to one (1) quart of water or milk to dilute. Seek immediate medical attention.

SECTION V: PHYSICAL DATA

APPEARANCE AND ODOR: White solid; powder; odorless
DENSITY (SPECIFIC GRAVITY): 2.700
BOILING POINT: Not applicable
MELTING POINT: Not applicable
WATER SOLUBILITY: 0.2% at 20° C
% VOLATILE BY VOLUME: Not applicable
EVAPORATION RATE: Not applicable
VAPOR PRESSURE (mm/Hg): Not applicable
VAPOR DENSITY (Air=1): Not applicable
pH: 10.4



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CAL-SEAL (EA-2)

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SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	Not applicable
FLAMMABLE LIMIT:	Not determined
EXTINGUISHING MEDIA:	Use media appropriate for surrounding materials.
SPECIAL FIRE FIGHTING PROCEDURES:	Self contained respirators required for fire fighting personnel.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	Not applicable

SECTION VII: REACTIVITY DATA

STABLE [XXX] INSTABLE []	
INCOMPATIBILITY (CONDITIONS TO AVOID):	None
HAZARDOUS DECOMPOSITION PRODUCTS:	None
HAZARDOUS POLYMERIZATION:	Will not occur [XXX] May occur []

SECTION VIII: PREVENTATIVE MEASURES

RESPIRATORY PROTECTION:	Suggest NIOSH/MESA approved dust mask.
VENTILATION:	Ten (10) changes per hour suggested
PROTECTIVE GLOVES:	Suggest plastic or rubber
EYE PROTECTION:	Suggest goggles.
OTHER PROTECTIVE EQUIPMENT:	Suggest rubber apron.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Store in a dry location to protect product quality. Avoid creating or inhaling dust. Avoid contact with skin, eyes and clothing.

STEPS TO BE TAKEN IN CASE OF SPILL OR LEAK:

Use protective equipment. Sweep up to remove. Avoid creating or inhaling dust.

WASTE DISPOSAL METHOD:

If not contaminated, reuse product. Get approval from landfill operator to transport to sanitary landfill.

SECTION IX: PREPARATION

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DATE ISSUED: March, 22, 1989

DATE REVISED: April 1, 2000

BY: Product Safety Committee

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SECTION I: IDENTIFICATION OF PRODUCT

PRODUCT NAME: **CLAY STABILIZER**
PRODUCT USE: Drilling System Additive
CHEMICAL FAMILY: Amine salts

WORK PLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)

WHMIS CLASSIFICATION: D-2B
WORK PLACE HAZARD: Skin and Eye Irritant

TRANSPORTATION OF DANGEROUS GOODS (TDG)

TDG CLASSIFICATION: Not Regulated by TDG

SECTION II: HAZARDOUS INGREDIENTS

Ingredient	Percent	CAS Number	LD50 (Oral rat)	LC50 (Dermal rabbit)
Organic Amine	10-30	124-09-4	750 mg/kg	Not determined

SECTION III: HEALTH HAZARDS

ROUTE OF ENTRY:

[XXX] Eye Contact, [XXX] Inhalation, [XXX] Ingestion []

SKIN AND EYE CONTACT: Not expected to be problem under normal conditions of use. Liquid may cause minor irritation, burning on prolonged contact with skin. Due to the pH of the material it will irritate eyes on contact. LD50 (skin, rabbit) 3700 mg/kg based on components.

INHALATION: Not expected to be a problem under normal conditions of use.

INGESTION: LD50 (oral, rat) 3000mg/kg based on component concentrations

SECTION IV: FIRST AID MEASURES

SKIN CONTACT: In case of skin contact, immediately flush contacted area for at least fifteen (15) minutes with water. Remove contaminated clothing immediately and launder before reuse. If irritation develops consult a doctor.

EYE CONTACT: In case of contact with eyes, flush with water for at least fifteen (15) minutes. Seek immediate medical attention.

INGESTION: If victim is conscious, give water. Do not induce vomiting. Seek immediate medical attention.

SECTION V: PHYSICAL DATA

APPEARANCE AND ODOR:	Clear odorless liquid
SPECIFIC GRAVITY:	1.042
BOILING POINT:	>100° C
MELTING POINT:	<-35° C
SOLUBILITY IN WATER:	Soluble
PERCENT VOLATILE BY VOLUME:	Not applicable
EVAPORATION RATE:	Not applicable
VAPOR PRESSURE (mm Hg):	Not applicable
VAPOR DENSITY (Air=1):	Not applicable
pH:	9-10



CLAY STABILIZER

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SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	>100° C (TCC)
FLAMMABLE LIMITS:	Not applicable
EXTINGUISHING MEDIA:	Water, dry chemical, foam.
SPECIAL FIRE FIGHTING PROCEDURES:	Self-contained respirators required for fire fighting personnel.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	None known
HAZARDOUS COMBUSTION PRODUCTS:	CO, CO ₂ , oxides of nitrogen

SECTION VII: REACTIVITY DATA

STABLE [XXX] INSTABLE []	
INCOMPATIBILITY (MATERIALS TO AVOID):	Strong oxidizing agents
HAZARDOUS DECOMPOSITION PRODUCTS:	CO, on combustion oxides of nitrogen.
HAZARDOUS POLYMERIZATION:	Will not occur [XXX] May occur []

SECTION VIII: PREVENTIVE MEASURES

SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION:	Suggest NIOSH/MESA approved dust mask
VENTILATION:	Ten (10) changes per hour suggested
PROTECTIVE GLOVES:	Suggest plastic or rubber
EYE PROTECTION:	Suggest goggles
OTHER PROTECTIVE EQUIPMENT (Specify):	Suggest rubber apron

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Store in cool, dry, well-ventilated place away from incompatible materials keep bags or fiber drums dry at all times. Wash thoroughly after handling. Do not get in eyes, on skin or on clothing.

Do not cut, grind, weld, or drill on or near this container. Containers, even those that have been emptied, will retain product residue, always obey hazard warnings and handled empty containers as if they were full.

STEPS TO BE TAKEN IN CASE MATERIAL IS SPILLED OR RELEASED:

Wear protective equipment. For small spills, sweep up and dispose of in DOT approved waste containers. For large spills, shovel into DOT approved waste containers. Keep out of sewers, storm drains, surface waters and soil.

WASTE DISPOSAL METHOD:

Dispose of contaminated product and materials used in cleaning up spills or leaks in a manner approved for this material. Consult appropriate federal, state and local regulatory agencies to ascertain proper disposal procedures.

SECTION IX: PREPARATION

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DATE ISSUED: July 18, 1997

PHONE: 403-279-8545

DATE REVISED: April 1, 2000

BY: Product Safety Committee

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SECTION I: IDENTIFICATION OF PRODUCT

PRODUCT NAME:	SUPER POLY
CHEMICAL FAMILY:	Cellulose Ether
PRODUCT USE:	Drilling Mud Additive.
WHMIS CLASSIFICATION:	Not a Controlled Product under WHMIS
WORK PLACE HAZARD:	Not applicable.

TRANSPORTATION OF DANGEROUS GOODS (TDGR)

CLASSIFICATION:	Not applicable.
PACKAGE GROUP:	Not applicable.
PRODUCT IDENTIFICATION NUMBER (PIN):	Not applicable.

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT	PERCENTAGE	CAS NUMBER	LD50 LC50
No Hazardous Ingredients.			

SECTION III: TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY:
[] Skin, [] Eye Contact, [] Inhalation, [] Ingestion

SKIN CONTACT:	May produce slight irritation with prolonged contact with moistened product.
EYE CONTACT:	Dust may produce mechanical irritation.
INHALATION:	Non-irritating to mucous membranes, however, breathing high concentrations of the dust may cause mechanical irritation of the nose, throat and upper respiratory tract.
INGESTION:	Passes through relatively inert. May cause gastro intestinal upset. Oral LD50 > 25 g/kg (rats).

SECTION IV: FIRST AID MEASURES

SKIN CONTACT: Wash exposed area with soap and water. If irritation develops seek medical attention.
EYE CONTACT: Flush eyes with running water for at least fifteen (15) minutes. If illness or adverse symptoms develop, seek medical attention.
INHALATION: Remove from exposure. If illness or adverse symptoms develop, seek medical attention.
INGESTION: Give two (2) glasses of water and induce vomiting. If illness or adverse symptoms develop, seek medical attention.

SECTION V: PHYSICAL DATA

APPEARANCE AND ODOR:	Light colored powder; Odorless.
DENSITY (SPECIFIC GRAVITY):	1.6
BOILING POINT:	Not applicable
MELTING POINT:	Not applicable
WATER SOLUBILITY:	Complete
% VOLATILE BY VOLUME:	Negligible
EVAPORATION RATE:	Not applicable
VAPOR PRESSURE: (mm Hg)	Not applicable
VAPOR DENSITY: (Air = 1)	Not applicable

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SUPER POLY

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SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:	Not applicable
FLAMMABLE LIMIT:	Not determined
EXTINGUISHING MEDIA:	Water, water fog, chemical, carbon dioxide CO ₂ .
SPECIAL FIRE FIGHTING PROCEDURES:	Evacuate area of all necessary personnel. Use self-contained respirators for fire fighting personnel.
UNUSUAL FIRE AND EXPLOSION HAZARDS:	If in a finely divided and suspended state, treat as a flammable dust. Material becomes very slippery when contacted with water.

SECTION VII: REACTIVITY DATA

STABLE [XXX] INSTABLE []	
INCOMPATIBILITY (CONDITIONS TO AVOID):	Strong oxidizing and caustic solutions.
HAZARDOUS DECOMPOSITION PRODUCTS:	Carbon Dioxide, Carbon Monoxide
HAZARDOUS POLYMERIZATION:	Will not occur [XXX] May occur []

SECTION VIII: PREVENTATIVE MEASURES

RESPIRATORY PROTECTION:	Suggest dust mask. Nuisance dust.
VENTILATION:	No special requirements.
PROTECTIVE GLOVES:	None required.
EYE PROTECTION:	Suggest goggles, nuisance dust.
OTHER PROTECTIVE EQUIPMENT:	None required.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Avoid ingestion. Practice reasonable caution and personal cleanliness. Avoid skin and eye contact. Material become slippery when wet.

STEPS TO BE TAKEN IN CASE OF SPILL OR LEAK:

Vacuum or sweep-up if dry. If wet, pick up with dry material such as sand or dirt. Avoid flushing with water as material becomes slippery.

WASTE DISPOSAL METHOD:

Dispose of material in accordance with local ordinances. Landfill suggested.

SECTION IX: PREPARATION

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DATE ISSUED: February 20, 1989

DATE REVISED: April 1, 2000

BY: Product Safety Committee

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SECTION I: IDENTIFICATION OF PRODUCT

PRODUCT NAME: **X-TRA GEL**
CHEMICAL FAMILY: Sodium Montmorillonite
WHMIS CLASSIFICATION: Class D-2(A)
WORK PLACE HAZARD: Potential Carcinogen; contains free silica

TRANSPORTATION OF DANGEROUS GOODS (TDGR)

CLASSIFICATION: Not Dangerous Goods
PACKAGE GROUP: Not applicable
PRODUCT IDENTIFICATION NUMBER (PIN): Not applicable

SECTION II: HAZARDOUS INGREDIENTS

INGREDIENT	PERCENTAGE	CAS NUMBER	OSAH PEL	ACGIH TLV
Bentonite		1302-78-9	5 mg/M	Not applicable
Quartz (Silica)		14808-60-7	10 mg/M	0.1 mg/M
Crystobalite		14464-46-1	10 mg/M	0.05 mg/M
Tridymite		15468-32-3	10 mg/M	0.05 mg/M

SECTION III: TOXICOLOGICAL PROPERTIES

ROUTE OF ENTRY:

[] Skin, [] Eye Contact, [XXX] Inhalation, [] Ingestion

ACUTE - SHORT TERM EXPOSURE:

Cough if exposed to dust at levels higher than TLV's.

CHRONIC - LONG TERM EXPOSURE:

May lead to development of silicosis or other respiratory problems if consistently exposed to free silica containing airborne bentonite.

SECTION IV: FIRST AID MEASURES

No first aid measures are suggested for chronic (long term exposure). For acute (short term exposure) remove patient from dusty environment.

SECTION V: PHYSICAL DATA

APPEARANCE AND ODOR: Pale gray to buff powder or granules; Odorless.
DENSITY (SPECIFIC GRAVITY): 2.35
BOILING POINT: Not applicable
MELTING POINT: 788° C
WATER SOLUBILITY: Insoluble; forms colloidal suspension.
% VOLATILE BY VOLUME: Not applicable
EVAPORATION RATE: Not applicable
VAPOR PRESSURE: (mm Hg) Not applicable
VAPOR DENSITY: (Air = 1) Not applicable
pH: 7 - 6

SECTION VI: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Not applicable
FLAMMABLE LIMIT: Not applicable

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X-TRA GEL

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EXTINGUISHING MEDIA: Not applicable
SPECIAL FIRE FIGHTING PROCEDURES: Not applicable
UNUSUAL FIRE AND EXPLOSION HAZARDS: Not applicable

SECTION VII: REACTIVITY DATA

STABLE [XXX] INSTABLE []

INCOMPATIBILITY (CONDITIONS TO AVOID): None

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS POLYMERIZATION: Will not occur [XXX] May occur []

SECTION VIII: PREVENTATIVE MEASURES

RESPIRATORY PROTECTION: NIOSH/MSHA approved respirators for silica bearing dust.
VENTILATION: Yes if particular; Personal air supply may be useful.
PROTECTIVE GLOVES: None required
EYE PROTECTION: Suggest goggles
OTHER PROTECTIVE EQUIPMENT: None required

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

Avoid breathing dust; wear an approved respirator. Practice reasonable caution and personal cleanliness. Avoid eye contact.

STEPS TO BE TAKEN IN CASE OF SPILL OR LEAK:

Vacuum or sweep up if dry. Avoid flushing with water as material may become extremely slippery.

WASTE DISPOSAL METHOD:

Dispose of material in a manner to prevent generating dust.

SECTION IX: PREPARATION

The information contained herein is given in good faith, but no warranty, expressed or implied is made.

DATE ISSUED: November 10, 1988

DATE REVISED: April 1, 2000

BY: Product Safety Committee