

# X-PLORE CLAY THIN

Product Data Sheet

Thinner

## Product Description

X-PLORE CLAY THIN concentrated liquid polymer dispersant provides superior mud and sediment removal from the producing formation and gravel pack. X-PLORE CLAY THIN does not contain phosphates and is a highly effective mud thinner.

## Applications/Functions

- Reduces viscosity and get strength of drilling muds.

## Typical Properties

| <u>Property</u>    | <u>Specification</u> |
|--------------------|----------------------|
| • Appearance       | Tan Liquid           |
| • Specific Gravity | 1.2 to 1.4           |
| • pH (neat)        | 6.5 to 7.5           |

## Recommended Treatment

As a Well Development Aid

- Add 1 gallon of X-PLORE CLAY THIN for every 500 gallons of water in system (2 Liters of X-PLORE CLAY THIN for every 1,000 Liters of water)
- Before introducing into the well, make sure it is entirely mixed
- If necessary, the X-PLORE CLAY THIN and water solution may be poured into the well.
- Mixture should be thoroughly blended in well, then agitated using a surge and swab, jetting, or other technique repeatedly every two hours for a period of up to 24 hours.
- Pump to waste until turbidity clears up and then connect well to distribution system

As Mud Thinner

- Start by adding one quart of X-PLORE CLAY THIN to 500 gallons of mud. Increase concentration until desired viscosity is achieved.

| Well Capacity Chart (Gallons per Foot) |                             |                        |                             |                        |                             |
|--|-----------------------------|------------------------|-----------------------------|------------------------|-----------------------------|
| Well Diameter (Inches)                 | Well Capacity in Gallons/Ft | Well Diameter (Inches) | Well Capacity In Gallons/Ft | Well Diameter (Inches) | Well Capacity in Gallons/Ft |
| 2                                      | 0.2                         | 12                     | 5.9                         | 24                     | 23.5                        |
| 4                                      | 0.7                         | 14                     | 8.0                         | 26                     | 27.6                        |
| 6                                      | 1.5                         | 18                     | 13.2                        | 30                     | 36.7                        |
| 8                                      | 2.6                         | 20                     | 16.3                        | 36                     | 52.9                        |
| 10                                     | 4.1                         | 22                     | 19.7                        | 48                     | 94.0                        |

Because the conditions of use of this product are beyond the seller's control, the product is sold without warranty either express or implied and upon condition that purchaser make its own tests to determine the suitability for purchaser's application. Purchaser assumes all risk of use and handling of this product. This product will be replaced if defective in manufacture or packaging or if damaged. Except for such replacement, seller is not liable for any damages caused by this product or its use. The statements and recommendations made herein are believed to be accurate. No guarantee of their accuracy is made, however.



| Well Capacity Chart (Liters per Meter) |                              |                             |                              |                             |                              |
|--|------------------------------|-----------------------------|------------------------------|-----------------------------|------------------------------|
| Well Diameter (Millimeters)            | Well Capacity (Liters/Meter) | Well Diameter (Millimeters) | Well Capacity (Liters/meter) | Well Diameter (Millimeters) | Well Capacity (Liters/Meter) |
| 51                                     | 2.0                          | 305                         | 73.0                         | 610                         | 292.0                        |
| 102                                    | 8.1                          | 356                         | 99.3                         | 660                         | 342.6                        |
| 152                                    | 18.3                         | 457                         | 164.2                        | 762                         | 456.1                        |
| 203                                    | 32.4                         | 508                         | 202.7                        | 914                         | 656.8                        |
| 254                                    | 50.7                         | 559                         | 245.3                        | 1219                        | 1167.7                       |

### Packaging

X-PLORE CLAY THIN is packaged in 5-gallon (19 L) pails and 1-gallon (3.8 L) jugs.

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# SAFETY DATA SHEET

## SECTION 1 - IDENTIFICATION

1(a): PRODUCT IDENTIFIER: X-PLORE CLAY THIN

1(b): OTHER MEANS OF IDENTIFICATION: None  
INTERNAL SDS NUMBER: 1524

1(c): RECOMMENDED USE AND RESTRICTION: Thinner  
No restriction information available.

1(d): MANUFACTURER: GLoB Energy Corporation  
5719 Armour Dr.  
Houston, TX 77020  
USA

1(e): EMERGENCY PHONE NUMBER: Chemtrec 1-800-424-9300

## SECTION 2 – HAZARD(S) IDENTIFICATION

2(a): CLASSIFICATION IN ACCORDANCE WITH PARAGRAPH (d) of §1910.1200

|                |  |
|----------------|--|
| Not classified |  |
|----------------|--|

2(b): HAZARD SYMBOL: None

SIGNAL WORD: None

HAZARD STATEMENT(S): Not classified

PRECAUTIONARY STATEMENT(S):

Prevention: None

Response: None

Storage: None

Disposal: None

2(c): HAZARDS NOT OTHER CLASSIFIED: None known.

## SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

| Substances                       | CAS Number | Percent (w/w) | GHS Classification – US |
|----------------------------------|------------|---------------|-------------------------|
| Contains no hazardous substances | Mixture    | N/A           | N/A                     |

## SECTION 4 – FIRST AID MEASURES

4(a): DESCRIPTION OF FIRST AID MEASURES:

General Advice: In case of serious or persistent conditions, call a doctor or emergency medical care.

Inhalation: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

Skin: Wash with soap and water. Get medical attention if irritation persists.

Ingestion: Under normal conditions, first aid procedures are not required.

4(b): MOST IMPORTANT SYMPTOMS/EFFECTS, ACUTE AND DELAYED:

No significant hazards expected.

4(c): INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED, IF NECESSARY:

Note to physician: Treat symptomatically

### SECTION 5 – FIRE FIGHTING MEASURES

5(a): SUITABLE (AND UNSUITABLE) EXTINGUISHING MEDIA:

Suitable extinguishing media: Water, fog, carbon dioxide, foam, dry chemical.  
 Unsuitable extinguishing media: None known.

5(b): SPECIFIC HAZARDS ARISING FROM THE CHEMICAL OR MIXTURE:

Decomposition in fire may produce toxic gases. Spills produce extremely slippery surfaces.

5(c): SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS:

Full protective clothing and approved self-contained breathing apparatus required for fire-fighting personnel.

### SECTION 6 – ACCIDENTAL RELEASE MEASURES

6(a): PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES:

Personal precautions: Avoid contact with skin, eyes and clothing. Avoid breathing vapors. Ensure adequate ventilation

Protective equipment: Wear appropriate personal protective equipment.

Environmental precautions: Prevent from entering sewers, waterways, or low areas.

6(b): METHODS FOR MATERIAL CONTAINMENT AND CLEANING UP:

Isolate spill and stop leak where safe. Contain spill with sand or other inert materials. Scoop up and remove.

### SECTION 7 – HANDLING AND STORAGE

7(a): PRECAUTIONS FOR SAFE HANDLING:

Avoid contact with eyes, skin, or clothing. Wash hands after use. Avoid breathing vapors. Ensure adequate ventilation. Use appropriate protective equipment. Handle in accordance with good industrial hygiene and safety practice.

7(b): CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:

Store away from oxidizers. Keep container closed when not in use. Store in a cool, dry location. Store away from direct sunlight. Keep from heat, sparks, and open flames. Store in a well ventilated area. Product has a shelf life of 36 months.

### SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

8(a): OCCUPATIONAL EXPOSURE LIMITS:

| Substances                       | CAS Number | OSHA PEL-TWA   | ACGIH TLV-TWA  |
|----------------------------------|------------|----------------|----------------|
| Contains no hazardous substances | Mixture    | Not applicable | Not applicable |

8(b): APPROPRIATE ENGINEERING CONTROLS: Use in a well ventilated area.

8(c): INDIVIDUAL PROTECTION MEASURES, SUCH AS PERSONAL PROTECTIVE EQUIPMENT:

If engineering controls and work practices cannot prevent excessive exposures, the selection and proper use of personal protective equipment should be determined by an industrial hygienist or other qualified professional based on the specific application of this product.

|                         |   |
|-------------------------|---|
| Eye protection:         | Wear safety glasses or goggles to protect against exposure. |
| Hand protection:        | Impervious rubber gloves.                                   |
| Skin protection:        | Normal work overalls.                                       |
| Respiratory protection: | Not normally needed.  |
| Clothing protection:    | Wear normal materials handling clothing.                    |
| Other protection:       | None known.   |

## SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9(a): APPEARANCE:

|                 |           |
|-----------------|-----------|
| Physical state: | Liquid    |
| Color:          | Yellowish |

9(b): ODOR: Slight

9(c): ODOR THRESHOLD: Not information available

9(d): pH: 7 - 9

9(e): MELTING POINT/FREEZING POINT: No information available

9(F): INITIAL BOILING POINT/RANGE: No information available

9(g): FLASH POINT: > 100°C / > 212°F Cleveland Open Cup

9(h): EVAPORATION RATE: No data available

9(i): FLAMMABILITY (SOLID, GAS): No data available

9(j): UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS:

|                           |                   |
|---------------------------|-------------------|
| Upper flammability limit: | No data available |
| Lower flammability limit: | No data available |

9(k): VAPOR PRESSURE: No data available

9(l): VAPOR DENSITY: No data available

9(m): RELATIVE DENSITY(Specific Gravity): 1.3

9(n): SOLUBILITY(IES):

|                               |                   |
|-------------------------------|-------------------|
| Solubility in water:          | Soluble in water  |
| Solubility in other solvents: | No data available |

9(o): PARTITION COEFFICIENT: N-OCTANOL/WATER: No data available

9(p): AUTO-IGNITION TEMPERATURE: No data available

9(q): DECOMPOSITION TEMPERATURE: No data available

9(r): VISCOSITY: Not determined

9(s): EXPLOSIVE PROPERTIES: No information available

9(t): OXIDIZING PROPERTIES: No information available

9(u): OTHER INFORMATION (VOC Content %): No data available

### SECTION 10 – STABILITY AND REACTIVITY

10(a): REACTIVITY: Not expected to be reactive.

10(b): CHEMICAL STABILITY: Stable under normal conditions.

10(c): POSSIBILITY OF HAZARDOUS REACTION: Will not occur.

10(d): CONDITIONS TO AVOID: None anticipated.

10(e): INCOMPATIBLE MATERIALS: Avoid strong oxidizers.

10(f): HAZARDOUS DECOMPOSITION PRODUCTS: Carbon monoxide and carbon dioxide.

### SECTION 11 – TOXICOLOGICAL INFORMATION

11(a): INFORMATION ON LIKELY ROUTES OF EXPOSURE:  
Principle route of exposure: Eye or skin contact, inhalation

11(b): SYMPTOMS RELATED TO THE PHYSICAL, CHEMICAL AND TOXICOLOGICAL CHARACTERISTICS:  
Acute Toxicity:  
Inhalation: May cause mild respiratory irritation.  
Eye Contact: May cause mild eye irritation.  
Skin Contact: Prolonged or repeated contact may cause slight skin irritation.  
Ingestion: Swallowing a relatively large amount of this material is unlikely to produce serious illness or death.

11(c): DELAYED AND IMMEDIATE EFFECTS AND ALSO CHRONIC EFFECTS  
Chronic Effects/Carcinogenicity: No data available to indicate product or components present at greater than 0.1% are chronic health hazards.

| Substance                        | CAS Number | LD50 Oral         | LD50 Dermal       | LC50 Inhalation   |
|----------------------------------|------------|-------------------|-------------------|-------------------|
| Contains no hazardous substances | Mixture    | No data available | No data available | No data available |

11(d): NTP/IARC/OSHA CARCINOGEN: No

## SECTION 12 – ECOLOGICAL INFORMATION

12(a): ECOTOXICITY:

| Substance                        | CAS Number | Toxicity to algae        | Toxicity to fish         | Toxicity to microorganisms | Toxicity to invertebrates |
|----------------------------------|------------|--------------------------|--------------------------|----------------------------|---------------------------|
| Contains no hazardous substances | Mixture    | No information available | No information available | No information available.  | No information available  |

12(b): PERSISTENCE AND DEGRADABILITY: Not determined

12(c): BIOACCUMULATIVE POTENTIAL: Not determined

12(d): MOBILITY IN SOIL: Not determined

12(e): OTHER ADVERSE EFFECTS: Not determined

## SECTION 13 – DISPOSAL CONSIDERATIONS

13(a): WASTE TREATMENT METHODS:

Disposal method: Disposal should be made in accordance with federal, state, and local regulations.

Contaminated packaging: Follow all applicable national or local regulations.

## SECTION 14 – TRANSPORT INFORMATION

US D.O.T.:

UN Number: Not restricted

UN Proper shipping name: Not restricted

Transport Hazard Class: Not applicable

Packing group: Not applicable

Environmental Hazards: Not applicable

US D.O.T. Bulk: Not restricted

Canadian TDG:

UN Number: Not restricted

UN Proper shipping name: Not restricted

Transport Hazard Class: Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

IMDG/IMO:

UN Number: Not restricted

UN Proper shipping name: Not restricted

Transport Hazard Class: Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

IATA/ICAO:

UN Number: Not restricted

UN Proper shipping name: Not restricted  
 Transport Hazard Class: Not restricted  
 Packing group: Not applicable  
 Environmental hazards: Not applicable

TRANSPORT IN BULK ACCORDING TO ANNEX II OF MARPOL 73/78 AND THE IBC CODE: Not applicable

SPECIAL PRECAUTIONS FOR USER: None

### SECTION 15 – REGULATORY INFORMATION

**US REGULATIONS:**

US TSCA Inventory: All components listed on inventory or are exempt.  
 EPA SARA Title III Extremely hazardous substances: Not applicable  
 EPA SARA (311, 312) Hazard Class: None  
 EPA SARA (313) Chemicals: This product does not contain a toxic chemical for routine annual "Toxic Chemical Release Reporting" under Section 313 (40 CFR 372).  
 EPA CERCLA/Superfund Reportable Spill Quantity: Not applicable  
 EPA RCRA Hazardous waste classification: If product becomes a waste, it does NOT meet the criteria of a hazardous waste as defined by the US EPA.  
 California Proposition 65: All components listed do not apply to the California Proposition 65 Regulation.  
 MA Right-to-know law: Does not apply  
 NJ Right-to-know law: Does not apply  
 PA Right-to-know law: Does not apply

CANADIAN REGULATIONS: All components listed on inventory or are exempt

### SECTION 16 – OTHER INFORMATION

|              |               |   |              |               |   |
|--------------|---------------|---|--------------|---------------|---|
| NFPA RATING: | HEALTH:       | 1 | HMIS RATING: | HEALTH:       | 1 |
|              | FLAMMABILITY: | 1 |              | FLAMMABILITY: | 1 |
|              | REACTIVITY:   | 0 |              | REACTIVITY:   | 0 |
|              | SPECIAL:      | 0 |              | SPECIAL:      | 0 |

Hazard scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

Employee training: Employees should be made aware of all hazards of this material, as stated in this SDS, before handling it.

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**KEY OR LEGEND TO ABBREVIATIONS AND ACRONYMS:**

ADR - The European Agreement concerning the International Carriage of Dangerous Goods by Road  
 AS/NZS 1715 - New Zealand Standard on Selection, use and maintenance of respiratory protective equipment  
 bw – body weight  
 CAS – Chemical Abstracts Service  
 C - Celsius  
 CLP – REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on Classification, Labelling and Packaging of substances and mixtures  
 d - day  
 EC – European Commission



EC10 – Effective Concentration 10%  
 EC50 – Effective Concentration 50%  
 EEC – European Economic Community  
 EN 374 - European standard on Protective gloves against chemicals and micro-organisms  
 EN 149 - European standard on filtering halfmasks to protect against particles  
 ErC50 – Effective Concentration growth rate 50%  
 FFP - Filtering Facepieces  
 h - hour  
 IATA/ICAO - International Air Transport Association / International Civil Aviation Organization  
 IBC Code – International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
 IMDG/IMO - International Maritime Dangerous Goods / International Maritime Organization  
 LC50 – Lethal Concentration 50%  
 LD50 – Lethal Dose 50%  
 LL0 – Lethal Loading 0%  
 LL50 – Lethal Loading 50%  
 MAK - Maximum Workplace Concentration  
 MARPOL – International Convention for the Prevention of Pollution from Ships  
 mg/kg – milligram/kilogram  
 mg/L – milligram/liter  
 mg/m<sup>3</sup> - milligram/cubic meter  
 mm - millimeter  
 mmHg - millimeter mercury  
 NDS - OEL-TWA [Poland najwyższe dopuszczalne stężenie na stanowisku pracy]  
 NDS - najwyższe dopuszczalne stężenie na stanowisku pracy  
 NIOSH – National Institute for Occupational Safety and Health  
 NOEC – No Observed Effect Concentration  
 NTP – National Toxicology Program  
 OEL – Occupational Exposure Limit  
 PBT – Persistent Bioaccumulative and Toxic  
 PC – Chemical Product category  
 PEL – Permissible Exposure Limit  
 ppm – parts per million  
 PROC – Process category  
 REACH – REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL  
 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals  
 RID - The European Agreement concerning the International Carriage of Dangerous Goods by Rail  
 R/H-phrases - Risk/Hazard-phrases  
 STEL – Short Term Exposure Limit  
 SU – Sector of Use category  
 SZW - Netherlands Ministry of Social Affairs and Employment  
 TWA – Time-Weighted Average  
 UN – United Nations  
 VLA-EC - short-time excursion limits [Spain valores límite ambientales para la exposición de corta duración]  
 VLA-ED - time-weighted average values for a whole work shift [Spain valores límite ambientales para la exposición  
 diaria]  
 VOC – Volatile Organic Carbon  
 vPvB – very Persistent and very Bioaccumulative  
 w/w - weight/weight

Disclaimer: All information and recommendations concerning this product is based on tests and data believed to be reliable; however, it is the user's responsibility to determine the safety, toxicity, and suitability for the user's own use of the product described herein. Since the actual use by others is beyond our control, no guarantee expressed or implied is made by GLOB Energy Corporation. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular conditions exist or because of applicable laws or government regulations.