## I. PRODUCT IDENTIFICATION

<table>
<thead>
<tr>
<th>SUPPLIER</th>
<th>Baroid Drilling Fluids Inc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADDRESS</td>
<td>P.O. BOX 1675, HOUSTON, TX 77251</td>
</tr>
<tr>
<td>TRADE NAME</td>
<td>High Yield Bentonite</td>
</tr>
<tr>
<td>GENERIC DESCRIPTION</td>
<td>Bentonite, Sodium Montmorillonite CAS #1302-78-9</td>
</tr>
</tbody>
</table>

## II. HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>MATERIAL OR COMPONENT</th>
<th>HAZARD DATA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respirable Dust May Contain</td>
<td>2-6 Low Concentrations of Crystalline Silica (SiO2) in the Form of Quartz, Cristobalite and Tridymite, May Be Present</td>
</tr>
</tbody>
</table>

## III. PHYSICAL DATA

<table>
<thead>
<tr>
<th>BOILING POINT (Deg F)</th>
<th>MELTING POINT</th>
<th>FREEZING POINT</th>
</tr>
</thead>
<tbody>
<tr>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>SPECIFIC GRAVITY (H2O = 1)</td>
<td>2.5</td>
<td>VAPOR PRESSURE (mm Hg)</td>
</tr>
<tr>
<td>VAPOR DENSITY (AIR = 1)</td>
<td>NA</td>
<td>SOLUBILITY IN WATER, % BY WT.</td>
</tr>
<tr>
<td>% VOLATILES BY VOLUME</td>
<td>NA</td>
<td>EVAPORATION RATE (Butyl Acetate = 1)</td>
</tr>
<tr>
<td>APPEARANCE AND ODOR</td>
<td>DENSITY @ 20 Deg C (Uncompacted)</td>
<td></td>
</tr>
<tr>
<td>GREY, TAN POWDER, NO ODOR</td>
<td>ND</td>
<td></td>
</tr>
<tr>
<td>pH</td>
<td>NA</td>
<td></td>
</tr>
</tbody>
</table>

NA = Not Applicable
ND = Not Determined

All information, recommendations and suggestions herein concerning our product are based on tests and data believed to be reliable. However, it is the user's responsibility to determine the safety, efficacy, and suitability for his 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 Baroid Corporation as to the effects of such use. The results to be obtained, or the safety and suitability of the product nor does Baroid Corporation assume any liability arising from the use by others of this product referred to herein. Nor is the information herein to be construed as absolutely complete since additional information may be necessary or desirable when particular or exceptional conditions or circumstances exist or because of applicable laws or regulations.

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Baroid Drilling Fluids, Inc.
P.O. Box 1675, Houston, Texas 77251
**BEST Sheet**

**HIGH YIELD BENTONITE**

### IV. FIRE AND EXPLOSION DATA

PRODUCT IS NOT FLAMMABLE OR EXPLOSIVE. DOES NOT SUPPORT COMBUSTION. EXTINGUISHING MEDIA: WATER SPECIAL FIRE FIGHTING PROCEDURES: NONE ANTICIPATED.

### V. HEALTH HAZARD INFORMATION

**CARCINOGENICITY** - SEE ROUTES OF EXPOSURE AND EFFECTS (BELOW)

<table>
<thead>
<tr>
<th>ROUTES OF EXPOSURE AND EFFECTS</th>
<th>ACUTE ORAL LD₅₀</th>
<th>ACUTE DERMAL LD₅₀</th>
<th>AQUATIC TOXICITY LC₅₀</th>
</tr>
</thead>
<tbody>
<tr>
<td>ND</td>
<td>ND</td>
<td>ND</td>
<td></td>
</tr>
</tbody>
</table>

**ACUTE ORAL LD₅₀**

- **ND**

**ACUTE DERMAL LD₅₀**

- **ND**

**AQUATIC TOXICITY LC₅₀**

- **ND**

**ROUTES OF EXPOSURE AND EFFECTS**

THIS PRODUCT CONTAINS FREE CRYSSTALLINE SILICA WHICH ACCORDING TO THE IARC HAS EXHIBITED LIMITED EVIDENCE OF CARCINOGENICITY IN HUMANS. PROLONGED INHALATION OF DUST MAY RESULT IN SILICOSIS, A NONCANCEROUS LUNG DISEASE. OSHA FINAL LIMITS TABLE Z-3 MINERAL DUSTS.

- **SILICA: CRYSSTALLINE**
  - 10 mg/m³
  - % SiO₂ + 2

- **QUARTZ (RESPIRABLE)**
  - 30 mg/m³
  - % SiO₂ + 2

IF CRISTOBALITE OR TRIDYMITE IS DETECTED, USE ONE HALF THE VALUE CALCULATED FROM FORMULAE FOR QUARTZ.

**EMERGENCY AND FIRST AID PROCEDURES**

NORMAL PERSONAL HYGIENE. EYES: FLUSH WITH WATER FOR 15 MINUTES. SKIN: FLUSH AREAS OF CONTACT WITH WATER. INHALATION: IF OVERCOME BY DUST, REMOVE TO FRESH AIR, IF BREATHING IS DIFFICULT, GIVE OXYGEN.
## VI. Reactivity Data

### Conditions Contributing to Instability
Stable

### Incompatibility
None

### Hazardous Decomposition Products
None

### Conditions Contributing to Hazardous Polymerization
None

## VII. Spill or Leak Procedures

**Steps to be taken if material is released or spilled**

Use dustless methods (vacuum) and place in closable container for disposal. Do not dry sweep so that airborne dust does not exceed PEL. Slippery when wet.

## VIII. Industrial Hygiene Control Measures

### Ventilation Requirements
Mechanical, general room ventilation. Use local ventilation to maintain TLVs (see Section V)

### Specific Personal Protective Equipment

#### Respiratory
- Dust mask, if TLV exceeded NIOSH approved filter respirator for dusts.

#### Eye
- Safety glasses, goggles

#### Gloves
- Work gloves

#### Other Clothing and Equipment
Optional
### IX. SPECIAL PRECAUTIONS

#### PRECAUTIONARY STATEMENTS

AVOID PROLONGED INHALATION. RECOMMENDED LABELING: FRONT PANEL: CAUTION SEE BACK PANEL FOR CAUTION BEFORE USE. BACK PANEL: CAUTION. THIS PRODUCT CONTAINS FREE CRYSTALLINE SILICA WHICH ACCORDING TO THE IARC HAS EXHIBITED LIMITED EVIDENCE OF CARCINOGENICITY IN HUMANS. PROLONGED INHALATION OF THE POWDER MAY RESULT IN SILICOSIS, A NONCANCEOROUS LUNG DISEASE. AVOID CREATING DUSTY CONDITIONS AND USE A NIOSH APPROVED DUST RESPIRATOR.

### OTHER HANDLING AND STORAGE REQUIREMENTS

STORE IN A SHELTERED AREA OR COVER TO PROTECT FROM MOISTURE.

### X. DEPARTMENT OF TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>PROPER SHIPPING NAME:</th>
<th>PLACARDS:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NOT REGULATED AS HAZARDOUS</td>
<td>NOT HAZARDOUS</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HAZARD CLASS:</th>
<th>REPORTABLE QUANTITY:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>NONE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>HAZARDOUS SUBSTANCE:</th>
<th>ID NUMBER:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>NONE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LABEL:</th>
<th>DATE:</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td>March, 1997</td>
</tr>
</tbody>
</table>
XI. REGULATORY INFORMATION

### STATUS ON SUBSTANCE LISTS

Comprehensive Environmental Response, Compensation and Liability Act of 1980, (CERCLA) requires notification of
the National Response Center of release of quantities of Hazardous Substances equal to or greater than the reportable
quantities (RQs) in 40 CFR 302.4.

Components present in this product which may require notification are:

<table>
<thead>
<tr>
<th>Chemical</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>NONE</td>
<td></td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on
Threshold Planning Quantities (TPQs) and release reporting based on RQs.

Components present in this product at a level which could require reporting under the statute are:

NONE

SARA requires the submission of annual reports of toxic chemicals that appear in 40 CFR 372 (for SARA 313). This
information must be included in all MSDS that are copied and distributed for this material.

Components present in this product at a level which could require reporting under the statute are:

NONE

Toxic Substances Control Act (TSCA)
The ingredients of this product are on the TSCA inventory.

XII. STATE RIGHT TO KNOW

QUARTZ IS ON CANADIAN WHMIS (WORKPLACE HAZARDOUS AMTERIAL INFORMATION SYS
STEM) INGREDIENT DISCLOSURE LIST, MASSACHUSETTS SUBSTANCE LIST, NEW JERSEY RIGHT TO
KNOW HAZARDOUS SUBSTANCE LIST AND PENNSYLVANIA HAZARDOUS SUBSTANCE LIST.