DynaPlex
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MSDS No. DY1027      Date Created: 12/16/03      Revised: 00/00/00

SECTION 1. GENERAL PRODUCT INFORMATION

Trade Name: DynaPlex
Chemical Name: Proprietary Product
Chemical Description: Sulfonated Lignite Phenolic Resin.
Chemical Nature: Sulfonated Humic Acid with Resin
NFPA Properties: Health: 1   Flammability: 0   Reactivity: 0

SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

No hazardous ingredients per 29 CFR Part 1910

SECTION 3. HAZARDS IDENTIFICATION

Description: Dark Brown Powder.
Routes of Entry: Inhalation: Yes   Skin: Yes   Ingestion: Yes
Effects of Overexposure: Low hazard for usual industrial handling.
Chronic & Acute Effects of overexposure: None known

SECTION 4. FIRST AID MEASURES

Ingestion: Do not give an emetic unless directed by a physician. Seek medical assistance immediately.
Skin: Remove contaminated clothing and wash with soap and water.
Inhalation: Remove to fresh air. Give oxygen if breathing is difficult. Seek medical assistance immediately.
Eyes: Immediately flush eyes with plenty of clean, warm water for at least 15 minutes.

SECTION 5. FIRE FIGHTING MEASURES

Flash Point: Stable to over 204°C (400°F)
Sensitivity to Mechanical Impact: None
Fire Fighting Extinguishing Media: Use water spray, carbon dioxide, dry chemical or foam.
Fire Fighting Equipment: Firefighters should wear appropriate Personal Protective Equipment and self contained (positive pressure if available) breathing apparatus with full face piece.
Fire and Explosion Hazards: None known.
Toxic Gasses Produced: Carbon monoxide, carbon dioxide and trace amounts of sulfur dioxide.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Wear appropriate Personal Protective Equipment, including a NIOSH (or equivalent) approved respirator. Try to sweep or vacuum the material into containers for reuse, if possible. If the material is contaminated, collect it in appropriate containers for disposal. The material is non-toxic.

SECTION 7. HANDLING AND STORAGE

Handling Information: Store in a cool, dry and well ventilated storage area. Avoid creating excessive dust. Wear protective clothing and equipment suitable for the work being done.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: If needed, use local exhaust to keep dust to a minimum. Practice good hygiene and good housekeeping to minimize contamination. An eye-wash station and a safety shower should be located in the immediate area.
Protective Clothing: Wear work gloves, safety goggles (or safety glasses with a side-shield) and a dust mask while handling this product.
Respiratory Protection: Only a dust mask is required where adequate ventilation conditions exist. Under dusty conditions, wear a NIOSH (or equivalent) approved respirator.
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

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<tr>
<th>Property</th>
<th>Value</th>
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<tbody>
<tr>
<td>Boiling Point</td>
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<tr>
<td>Melting Point</td>
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<tr>
<td>Specific Gravity</td>
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<tr>
<td>Color</td>
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<tr>
<td>Vapor Pressure</td>
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<tr>
<td>Odor</td>
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<td>Percent Volatility</td>
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</table>

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable
Hazardous polymerization: Will not occur
Hazardous Decomposition Products: Carbon monoxide, carbon dioxide and trace amounts of sulfur dioxide.
Conditions to Avoid: Excessive dust.
Incompatibility: None Known.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute Oral Toxicity: No data available.
Acute Inhalation Toxicity: No data available.

Environmental impact tests have been conducted using this product in a brine mud system. The tests were conducted by Environmental Assessment Center of the Second Institute of Oceanography according to bioassay procedures. The base mud was made by 6.4% bentonite. Brine had 15% salinity and pH was 8.2. Dissolved oxygen was saturated. The concentration of this product was 3.0%. Ten Mysid shrimps were exposed to the simulated mud. After 96 hours, six shrimps survived. The results classified this product as a non-toxic drilling mud additive.

SECTION 12. ECOLOGICAL INFORMATION

Ecological Information: Product not considered toxic to aquatic organisms.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste Disposal Method: Disposal must be in accordance with federal, state and local regulations. Care must be taken to prevent environmental contamination from the disposal of material, residues and containers.

SECTION 14. TRANSPORT INFORMATION

DOT Shipping Name: Not a DOT/IMO Hazardous Material

SECTION 15. REGULATORY INFORMATION

No other regulatory concerns.

SECTION 16. OTHER INFORMATION

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Prepared By: Product Safety Committee
Sections Modified: All Sections. Revised Format
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