1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product information

Product name PolyRite

Recommended use of the chemical and restrictions on use
Use of the Substance/Mixture

Drilling applications

Recommended restrictions on use

Supplier's details

DrilRite-Chem LLC
702 Blackjack St
Winnsboro, TX USA 75494
Telephone +1-903-767-4230

Emergency telephone number

CHEMTREC: 1-800-424-9300

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Eye irritation; Category 2; Causes serious eye irritation.

GHS-Labelling

Hazard pictograms

![Exclamation Mark]
Signal word: Warning

Hazard statements: H319 Causes serious eye irritation.

Precautionary statements:
- Prevention:
  - P264 Wash hands thoroughly after handling.
  - P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- Response:
  - P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P337 + P313 If eye irritation persists: Get medical advice/ attention.

Other hazards which do not result in classification

Advice: Contaminated surfaces will be extremely slippery.
Potential environmental effects: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substances /Mixtures

- Chemical nature: Anionic polyacrylamide in water-in-oil emulsion.
Hazardous components

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration[%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td>22 - 26 %</td>
</tr>
<tr>
<td>Alcohols, C12-16, ethoxylated</td>
<td>68551-12-2</td>
<td>0 - 2.89 %</td>
</tr>
<tr>
<td>Alcohols, C12-14, ethoxylated</td>
<td>68439-50-9</td>
<td>0 - 2.89 %</td>
</tr>
<tr>
<td>Alcohols, C10-16, ethoxylated</td>
<td>68002-97-1</td>
<td>0 - 2.89 %</td>
</tr>
</tbody>
</table>

Components listed above that have a zero minimum and a common maximum range are interchangeably used components based on availability. Only one of these components is contained in the product up to the maximum amount noted.

4. FIRST AID MEASURES

**Description of first aid measures Inhalation**
Move to fresh air. Consult a physician if necessary.

**Skin contact**
Take off contaminated clothing and shoes immediately. Wash off with soap and water. If symptoms persist, call a physician. Wash contaminated clothing before re-use.

**Eye contact**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.

**Ingestion**
Rinse mouth with water. Do NOT induce vomiting. Obtain medical attention.

**Most important symptoms and effects, both acute and delayed**

5. FIREFIGHTING MEASURES

**Suitable extinguishing media**
Water spray, Carbon dioxide (CO2), Dry chemical
Alcohol-resistant foam

**Special hazards arising from the substance or mixture**
No information available.
Special protective actions for fire-fighters

Wear self-contained breathing apparatus and protective suit.
Use NIOSH/MSHA approved respiratory protection.

Further information
In the event of fire, cool tanks with water spray.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Where the exposure level is not known, wear approved, positive pressure, self-contained respirator. Where the exposure level is known, wear approved respirator suitable for the level of exposure.

Environmental precautions
Try to prevent the material from entering drains or water courses.

Methods and materials for containment and cleaning up
Danger for slipping. Soak up with inert absorbent material. Take up mechanically and collect into suitable containers for disposal. Flush with water. Use detergent if needed.

7. HANDLING AND STORAGE

Precautions for safe handling
Ensure adequate ventilation. For personal protection see SDS section 8.

Conditions for safe storage, including any incompatibilities
Flashpoint determination was performed using a Pensky Martens type closed cup method. The method indicates a flash point greater than 93,3° C (200° F). Although there was no flashpoint detected below 93,3° C (200° F) some flammable vapours were evolved during the test as evidenced by the enlargement of the flame. Therefore caution should be exercised during storage and handling.

Materials for packaging
Unsuitable material: To avoid product degradation and equipment corrosion, do not use iron, copper or aluminium containers or equipment.

Materials to avoid:
Strong oxidizing agents

Storage stability:
8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value</th>
<th>Form of exposure</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distillates (petroleum), hydrotreated light</td>
<td>64742-47-8</td>
<td></td>
<td>Vapour</td>
<td>197 ppm 1,200 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>TWA</td>
<td>200 mg/m³</td>
<td>2006-11-29</td>
<td>CA BC OEL</td>
</tr>
</tbody>
</table>

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing. Do not breathe vapour. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation.

**Individual protection measures, such as personal protective equipment Respiratory protection**

When there is potential for airborne exposures in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

**Hand protection**

Impervious gloves

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

**Skin and body protection**

Protective clothing.

**Eye protection**

Tightly fitting safety goggles
9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: liquid, viscous

Colour: white

Odour: hydrocarbon-like

pH: No data available

Initial boiling point and boiling range: No data available

Flash point: > 200 °F (Pensky-Martens)

Explosive properties:
- Lower explosion limit: No data available
- Upper explosion limit: No data available

Vapour pressure: No data available

Density: 8.38 lb/gal

Bulk density: 1.006 kg/m³

Solubility(ies):
- Water solubility: soluble

Decomposition temperature: No data available

Surface tension: not determined

10. STABILITY AND REACTIVITY

Reactivity

Chemical stability

Possibility of hazardous reactions

Hazardous reactions: Hazardous polymerisation does not occur.
Conditions to avoid

Incompatible materials

Hazardous decomposition products

Hazardous decomposition products:

- Ammonia
- Carbon oxides
- Nitrogen oxides (NOx)

Thermal decomposition:

Note: No data available

11. TOXICOLOGICAL INFORMATION

Information on toxicological effects

Acute oral toxicity

Conclusion: The acute toxicological results displayed may not be the results of actual testing of this material but based on a similar tested material.

Remarks: estimated

/Rat/5,000 mg/kg/LD50

Acute oral toxicity

Distillates (petroleum), hydrotreated light:

/Rat/5,000 mg/kg/LD50

Acute inhalation toxicity

LC50/Rat/4 h/>/20 mg/lRemarks: estimated

Acute inhalation toxicity

Distillates (petroleum), hydrotreated light:

LC50/Rat/4 h/>/5.2 mg/l

Acute dermal toxicity

LD50/Rabbit/>

/2,000 mg/kg

Remarks: estimated

Acute dermal toxicity

Distillates (petroleum), hydrotreated light:

LD50/Rabbit/>

/2,000 mg/kg
<table>
<thead>
<tr>
<th><strong>Skin corrosion/irritation</strong></th>
<th>/OECD Test Guideline 439/Read-across (Analogy)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Conclusion:</strong> No skin irritation</td>
<td></td>
</tr>
</tbody>
</table>

**Serious eye damage/eye irritation**

Calculation method

Conclusion: Causes serious eye irritation.

**Respiratory or skin sensitisation**

**Skin sensitisation**

Conclusion: Not sensitizing.

**Skin sensitisation Germ cell mutagenicity**

Distillates (petroleum), hydrotreated light:

Conclusion: This substance is not classified as a sensitizer.

**Genotoxicity in vitro**

Distillates (petroleum), hydrotreated light:

Conclusion: No known effect.

**Genotoxicity in vivo**

Distillates (petroleum), hydrotreated light:

Conclusion: Not mutagenic

**Carcinogenicity**

**Carcinogenicity**

Distillates (petroleum), hydrotreated light:

Not classified by IARC or NTP.

**Reproductive toxicity**

**Toxicity for reproduction**

Distillates (petroleum), hydrotreated light:

Conclusion: Did not show teratogenic effects in animal experiments.
12. ECOLOGICAL INFORMATION

Ecotoxicity effects Aquatic toxicity

Ecotoxicological information provided is based on a structurally or compositionally similar product. This material is not classified as dangerous for the environment.
LC50/96 h/Danio rerio (zebra fish)/Acute toxicity/OECD Test Guideline 203: > 100 mg/l
EC50/48 h/Daphnia magna (Water flea)/Immobilization/OECD Test Guideline 202: > 100 mg/l Remarks: Ecotoxicological information provided is based on a structurally or compositionally similar product.
IC50/72 h/Green algae (Selenastrum capricornutum)/Growth inhibition/OECD Test Guideline 201: > 100 mg/l
Remarks: Ecotoxicological information provided is based on a structurally or compositionally similar product.

Toxicity to other organisms

No data available

Persistence and degradability

Biological degradability:
CO2 Evolution Test/OECD Test Guideline 301B:
Remarks: Ecotoxicological information provided is based on a structurally or compositionally similar product.
The polymeric ingredient is not readily biodegradable. Transmission of polyelectrolytes through biological membranes is nonexistent due to large molecule size and its hydrophilic nature.

Bioaccumulative potential

Because of the high molecular weight of the polymer diffusion through biological membranes is very small. Bioaccumulation is unlikely. Mobility in soil
Water solubility: soluble
Surface tension: not determined

Other adverse effects

No data available
Additional ecological information: Ecotoxicological information provided is based on a structurally or compositionally similar product.
13. DISPOSAL CONSIDERATIONS

**Product**  
Recycling, recovery and reuse of materials is recommended if permitted by regulations. If recycling is not practicable, dispose of in compliance with local regulations. Incineration is recommended.  
EPA Hazardous Waste - NO.

**Contaminated packaging**  
Packages that cannot be cleaned must be disposed of the same way as the unused product.

14. TRANSPORT INFORMATION

**Land transport**  
Not classified as dangerous in the meaning of transport regulations.  
Store between 5-30°C.  
Protect from frost.  
Keep away from direct sunlight.

**Sea transport**  
Not classified as dangerous in the meaning of transport regulations.  
Store between 5-30°C.  
Protect from frost.  
Keep away from direct sunlight.

**Air transport**  
Not classified as dangerous in the meaning of transport regulations.  
Store between 5-30°C.  
Protect from frost.  
Keep away from direct sunlight.

**Special precautions for user**  
No data available
15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA Title III
Section 311 Categories Immediate (Acute) Health Effects: Yes; Delayed (Chronic) Health Effects: No; Fire
Hazard: No; Sudden Release Of Pressure Hazard: No; Reactivity Hazard: No;

SARA 302 Extremely Hazardous Substances
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.
None Present ()

SARA 313 - Specific Toxic Chemical Listings
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.
None Present ()

California Proposition 65
Acrylamide (79-06-1) < 0.1 %
Remarks: This product contains a chemical or chemicals known to the state of California to cause cancer, birth defects or other reproduction harm.

Other regulations : None.

Notification status
: All components of this product are included in the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.
: All components of this product are included in the European Inventory of Existing Chemical Substances (EINECS) or are not required to be listed on EINECS.
: All components of this product are included in the United States TSCA Chemical Inventory or are not required to be listed on the United States TSCA Chemical Inventory.
: All components of this product are included in the United States TSCA Chemical Inventory or are not required to be listed on the United States TSCA Chemical Inventory.
: All components of this product are included in the Canada
Domestic Substance List (DSL) or are not required to be listed on the Canada Domestic Substance List (DSL).

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16. OTHER INFORMATION

HMIS Rating
Health: 2
Flammability: 1
Reactivity: 0

NFPA Rating
Health: 2
Fire: 1
Reactivity: 0

Training advice
Read the safety data sheet before using the product. Further information

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Sources of key data used to compile the Safety Data Sheet
Regulations, databases, literature, own tests.

Additions, Deletions, Revisions
Relevant changes have been marked with vertical lines.