# Safety Data Sheet

## SECTION 1 — COMPANY IDENTIFICATION

**Manufacturer:** Dexsil Corporation  
One Hamden Park Drive  
Hamden, CT  06517  

**Emergency Telephone Number:**  
USA (800) 424-9300 (CHEMTREC)  
INT'L (703) 741-5970  

**Telephone Number:** (203) 288-3509  
Email: info@dexsil.com  

**Product Description:** The PetroFLAG product line is an On-Site test kit for quantifying petroleum hydrocarbons in soil.

## SECTION 2 — HAZARDS IDENTIFICATION

### 2.1. Classification of the substance or mixture

**Ampule 1 (Extract Solvent \ Methanol Solution)**

- Flam. Liq. 2;H225: Highly Flammable liquid and vapor.  
- Acute Tox. 3;H331: Toxic if inhaled.  
- Acute Tox. 3;H311: Toxic in contact with skin.  
- STOT SE 1;H370: Causes damage to organs.  
- Specific Target Organs: (Not Available)

**Ampule 2 (Calibration Standard\Methanol Solution )**

- Flam. Liq. 2;H225: Highly Flammable liquid and vapor.  
- Acute Tox. 3;H331: Toxic if inhaled.  
- Acute Tox. 3;H311: Toxic in contact with skin.  
- STOT SE 1;H370: Causes damage to organs.  
- Specific Target Organs: (Not Available)

**Ampule 3 (Screw-top Vial\5% NaCl Solution)**

No applicable GHS categories.

### 2.2. Label elements

**Ampule 1 (Extract Solvent \ Methanol Solution)**

- H225: Highly flammable liquid and vapor.  
- H301: Toxic if swallowed.  
- H311: Toxic in contact with skin.  
- H331: Toxic if inhaled.  
- H370: Causes damage to organs.

[**Prevention**]:

- P210: Keep away from heat / sparks / open flames / hot surfaces - No smoking.  
- P241: Use explosion-proof electrical / ventilating / light / equipment.  
- P261: Avoid breathing dust / fume / gas / mist / vapors / spray.  
- P264: Wash thoroughly after handling.  
- P270: Do not eat, drink or smoke when using this product.

[**Response**]:

- P271: Use only outdoors or in a well-ventilated area.  
- P280: Wear protective gloves / eye protection / face protection.

- P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician.  
- P302+352 IF ON SKIN: Wash with plenty of soap and water.  
- P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.  
- P304+312 IF INHALED: Call a POISON CENTER or doctor / physician if you feel unwell.  
- P307+311 IF exposed: Call a POISON CENTER or doctor / physician.  
- P321: Specific treatment (see information on this label).  
- P330: Rinse mouth.
P340 Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P363 Wash contaminated clothing before reuse.
P370+378 In case of fire: Use extinguishing media listed in section 5 of SDS for extinction.

[Storage]:

P403+233 Store in a well ventilated place. Keep container tightly closed.
P405 Store locked up.

[Disposal]:
P501 Dispose of contents / container in accordance with local / national regulations.

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Ampule 2 (Calibration Standard: Methanol Solution)

Danger

H225 Highly flammable liquid and vapor.
H301 Toxic if swallowed.
H311 Toxic in contact with skin.
H331 Toxic if inhaled.
H370 Causes damage to organs.

[Prevention]:
P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.
P241 Use explosion-proof electrical / ventilating / light / equipment.
P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
P264 Wash thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves / eye protection / face protection.

[Response]:
P301+310 IF SWALLOWED: Immediately call a POISON CENTER or doctor / physician if you feel unwell.
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[Storage]:
P403+233 Store in a well ventilated place. Keep container tightly closed.
P405 Store locked up.

[Disposal]:
P501 Dispose of contents / container in accordance with local / national regulations.

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Ampule 3 (Screw-top Vial: 5% NaCl Solution)

No applicable GHS categories.

For additional information on toxicity, please refer to Section 11.

SECTION 3 — COMPOSITION/INFORMATION ON INGREDIENTS

The PetroFLAG Test Reagent Kit consists of two break-top ampules (extraction solvent and calibration solvent) and a screw top vial. Screw top vial contents are non-hazardous.

<table>
<thead>
<tr>
<th>Component</th>
<th>Contents</th>
<th>CAS#</th>
<th>EC#</th>
<th>GHS Classification</th>
<th>% liquid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ampule 1 Extract Solvent</td>
<td>Methanol Solution</td>
<td>67-56-1</td>
<td>200-659-6</td>
<td>Flam. Liq. 2;H225, Acute Tox. 3;H331, Acute Tox. 3;H311, Acute Tox. 3;H301, STOT SE 1;H370</td>
<td>62.00%</td>
</tr>
<tr>
<td>Ampule 2 Calibration Standard</td>
<td>Methanol Solution</td>
<td>67-56-1</td>
<td>200-659-6</td>
<td>Flam. Liq. 2;H225, Acute Tox. 3;H331, Acute Tox. 3;H311, Acute Tox. 3;H301, STOT SE 1;H370</td>
<td>6.00%</td>
</tr>
<tr>
<td>Screw-top Vial</td>
<td>5% NaCl Solution</td>
<td>7647-14-5</td>
<td>231-598-3</td>
<td></td>
<td>32.00%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100.00%</td>
</tr>
</tbody>
</table>
**SECTION 4 — FIRST AID MEASURES**

**First Aid**
In case of contact with reagents, rinse well with water.

**Eye Contact**
For all kit components, flush eyes with large amounts of water for 15 minutes. Seek medical attention.

**Skin contact**
Flush with large amounts of water. Use soap and water to wash away organic components.

**Inhalation**
In case of inhalation, remove to fresh air. Seek medical attention.

**Ingestion:** If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.

**SECTION 5 --- FIRE AND EXPLOSION HAZARD**

<table>
<thead>
<tr>
<th>Property</th>
<th>Ampule 1 &amp; Ampule 2</th>
<th>Screw-top Vial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash Point</td>
<td>50°F</td>
<td>N/A</td>
</tr>
<tr>
<td>Flammable Limit</td>
<td>Unknown</td>
<td>N/A</td>
</tr>
<tr>
<td>Extinguishing Media</td>
<td>Dry chemical, CO₂</td>
<td>None</td>
</tr>
<tr>
<td>Special Fire Fighting</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

**SECTION 6 — ACCIDENTAL RELEASE MEASURES**

**Personal Protection**
Chemical safety glasses and rubber gloves

**Spills and Leaks**
Ampule 1 & Ampule 2 - Methanol Solution
Solvent absorbent recommended for spills. Flush area with water.

**SECTION 7 — HANDLING AND STORAGE**

**Protective equipment**
Wear appropriate safety equipment when performing the test on site.

**Storage**
Store test kits in a cool, dry place. Check expiration date prior to performing test.

**SECTION 8 — EXPOSURE CONTROLS/ PERSONAL PROTECTIVE EQUIPMENT**

**Engineering Controls**
None required

**Personal Protective Equipment (PPE)**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory protection</td>
<td>None required where adequate ventilation conditions exist. If airborne concentration is high, use a chemical cartridge respirator.</td>
</tr>
<tr>
<td>Ventilation</td>
<td>Perform test only in a well-ventilated area.</td>
</tr>
<tr>
<td>Protective gloves</td>
<td>Always wear rubber gloves when performing the PETROFLAG test.</td>
</tr>
<tr>
<td>Eye protection</td>
<td>Wear safety glasses.</td>
</tr>
<tr>
<td>General Hygiene Measures</td>
<td>Avoid contact with skin, eyes and clothing. Wash after running tests.</td>
</tr>
</tbody>
</table>
**SECTION 9 — PHYSICAL/CHEMICAL CHARACTERISTICS**

<table>
<thead>
<tr>
<th>Property</th>
<th>Ampule 1</th>
<th>Ampule 2</th>
<th>Screw-top Vial</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boiling Pt. °C</td>
<td>64.5</td>
<td>64.5</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure mm Hg @ 21°C</td>
<td>97</td>
<td>97</td>
<td>N/A</td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>miscible</td>
<td>Miscible</td>
<td>complete</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.79</td>
<td>0.79</td>
<td>1.01</td>
</tr>
<tr>
<td>Percent Volatile</td>
<td>99.9</td>
<td>99.9</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation Rate Butyl Acetate =1</td>
<td>5.9</td>
<td>5.9</td>
<td>N/A</td>
</tr>
<tr>
<td>Appearance</td>
<td>clear</td>
<td>clear</td>
<td>clear</td>
</tr>
<tr>
<td>Odor</td>
<td>pleasant</td>
<td>pleasant</td>
<td>none</td>
</tr>
</tbody>
</table>

N/A = not available

**SECTION 10 — REACTIVITY DATA**

**Chemical Stability**  
All components are stable under recommended storage conditions.

**Conditions to Avoid**  
*Ampule 1 and Ampule 2:* Excessive heat, sparks or flame

**Hazardous Decomposition Productions**  
*Ampule 1 and Ampule 2:* Solutions are stable

**Hazardous Polymerization**  
Will not occur.

**SECTION 11 — TOXICOLOGICAL INFORMATION**

**Carcinogenicity**  
NTP: No     IARC: No     Z List: No     OSHA Reg: No

Diglyme may cause teratogenic or mutagenic effects and cause harm to the unborn child.

**Toxicity Data**

<table>
<thead>
<tr>
<th>Component</th>
<th>Contents</th>
<th>TLV/(PEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ampule 1 “Extraction Solvent”</td>
<td>Methanol Sol’n</td>
<td>200 ppm/(200 ppm)</td>
</tr>
<tr>
<td>Ampule 2 “Calibration Standard”</td>
<td>Methanol Sol’n</td>
<td>200 ppm/(200 ppm)</td>
</tr>
<tr>
<td>Screw-top Vial</td>
<td>5% NaCl Sol’n</td>
<td>N/A</td>
</tr>
</tbody>
</table>

**SECTION 12 — ECOLOGICAL INFORMATION**

**Ethanol:** Ecotoxicity: Fish: Rainbow trout: LC50 = 12900-15300 mg/L; 96 Hr; Flow-through @ 24-24.3°C  
Fish: Rainbow trout: LC50 = 11200 mg/L; 24 Hr; Fingerling (Unspecified)  
Bacteria: Phytophthora phosphoreum: EC50 = 34900 mg/L; 5-30 min; Microtox test  
When spilled on land it is apt to volatilize, biodegrade, and leach into the ground water, but no data on the rates of these processes could be found. Its fate in ground water is unknown. When released into water it will volatilize and probably biodegrade. It would not be expected to adsorb to sediment or bioconcentrate in fish.

**Methanol:** Ecotoxicity in water (LC50): 29400 mg/l 96 hours [Fathead Minnow].

**SECTION 13 — DISPOSAL CONSIDERATIONS**

Used reagents contain oil and solvent. Dispose of as an organic waste in accordance with all applicable federal, state and local environmental regulations.
SECTION 14 — Transportation Information

DOT
Proper Shipping Name: Methanol Solution
Limited Quantities: As originally packaged by Dexsil Corporation, packages are shipped under Limited Quantities under 49 CFR 173.150, Exceptions for Class 3 (flammable) liquids.

IATA
Proper Shipping Name: Dangerous Goods in Excepted Quantities
IATA UN Number: 1230, 1170
Hazard Class: 3 (6.1)
Packing Group: II

SECTION 15 — Regulatory Information

SARA Listed: Ethanol and methanol are identified on SARA Sec. 313.
TSCA Inventory Items: Ethanol and methanol
CERCLA Listed: Ethanol and methanol
EINECS: Components of this product are on the European Inventory of Existing Commercial Chemical Substances.

SECTION 16 — Other Information

The full text of the phrases appearing in section 3 is:
H225 Highly flammable liquid and vapor.
H226 Flammable liquid and vapor.
H311 Toxic in contact with skin.
H331 Toxic if inhaled.
H370 Causes damage to organs.

The information in this Material Safety Data Sheet meets the requirements of the United States OCCUPATIONAL SAFETY AND HEALTH ACT and regulations promulgated thereunder (29 CFR 1910.1200 et. seq.) and the Canadian WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM. This document is intended only as a guide to the appropriate precautionary handling of the material by a person trained in, or supervised by a person trained in, chemical handling. The user is responsible for determining the precautions and danger of these chemicals for his or her particular application. Depending on usage, protective clothing including eye and face guards and respirators must be used to avoid contact with material or breathing chemical vapors/fumes. Exposure to this product may have serious adverse health effects. These chemicals may interact with other substances. Since the potential uses are so varied, Dexsil cannot warn of all of the potential dangers of use or interaction with other chemicals or materials. Dexsil warrants that the chemicals meet the specifications set forth on the label.

DEXSIL DISCLAIMS ANY OTHER WARRANTIES; EXPRESSED OR IMPLIED WITH REGARD TO THE PRODUCT SUPPLIED HEREUNDER, IT’S MERCHANTABILITY OR ITS FITNESS FOR A PARTICULAR PURPOSE.

The user should recognize that this product can cause severe injury and even death, especially if improperly handled or the known dangers of use are not heeded. READ ALL PRECAUTIONARY INFORMATION. As new documented general safety information becomes available, Dexsil will periodically revise this Material Safety Data Sheet. CHEMTREC emergency telephone number is to be used ONLY in the event of CHEMICAL EMERGENCIES involving a spill, leak, fire, exposure, or accident involving chemicals. All non-emergency questions should be directed to the Customer Service Dept. at 1-203-288-3509.

For additional information, contact Dexsil.

Date Prepared: 04-26-2019 Revision 1