

# Material Safety Data Sheet

To comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200.

## HYDROSCOUT OIL/SOIL REAGENTS

### SECTION 1 --- MANUFACTURER

**Manufacturer's Name:**

Dexsil Corporation

**Emergency Telephone Number:**

USA (800) 424-9300 (CHEMTREC)

INT'L (202) 483-7616

**Address:**

One Hamden Park Drive  
Hamden, CT 06517

**Telephone Number:**

(203) 288-3509

**Date Prepared:** 12-20-07

**Date Reviewed:** 12-20-07

### SECTION 2 — COMPOSITION/INFORMATION ON INGREDIENTS

The HYDROSCOUT Oil Reagents consists of a test tube containing a glass ampule which contains a calcium hydride solution in aromatic hydrocarbons, a glass ampule containing a green-colored water/propylene glycol mixture and a polypropylene sampling syringe. The HYDROSCOUT Dilution Kit Reagents consist of a black-screw cap vial for measuring high water levels (>20%) in oils. The HYDROSCOUT Soil Reagents consist of break-top ampule containing reagent alcohol and 50-ml sample tube.

<u>Component</u>	<u>Contents</u>	<u>CAS#</u>	<u>Concentration in kit</u>
<i>Gray Ampule</i>	[Calcium Hydride]* in arom. Hydrocarbons	7789-78-8 mixture	81.19%/[5.27%]*
<i>Green Ampule</i>	Water & [Propylene glycol]*	7732-18-5 57-55-6	18.81%/[6.58%]*
<i>Black-Capped Vials</i> (Dilution Kit Only)	Diglyme	111-96-6	100%
<i>Extraction Solvent</i> Ampule (Soil Kit Only)	Reagent Alcohol	0064-17-5	100%

{\*Bracketed component reported as a % of total liquid in kit}

### SECTION 3 — HAZARDS IDENTIFICATION

Harmful if inhaled or swallowed.

May cause eye irritation.

May cause skin burns.

Material may be irritating to mucous membranes and upper respiratory tract.

Ingestion will cause burns of the gastrointestinal tract.

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

## SECTION 4 — FIRST AID MEASURES

### **First Aid**

In case of contact with reagents, rinse well with water. If swallowed, do NOT induce vomiting. In case of inhalation, remove to fresh air.

### **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 for 15 minutes.

### **Inhalation**

In case of inhalation, remove to fresh air.

## SECTION 5 --- FIRE AND EXPLOSION HAZARD

<b>Flash Point</b>	Calcium Hydride/Arom. Hydrocarbons Water/Propylene Glycol Diglyme Reagent Alcohol	NA/100 - 120°F NA/217°F 135°F 48°F	
<b>Flammable Limit</b>	Calcium Hydride/Arom. Hydrocarbons Water/Propylene Glycol Diglyme Reagent Alcohol	Upper - NA/7.0% Upper - NA Upper - Unknown Upper - Unknown	Lower - NA/1.0% Lower - NA Lower - Unknown Lower - Unknown

**Extinguishing Media** Dry Chemical, foam, powdered limestone, CO<sub>2</sub>.

**Special Fire Fighting Procedures** Wear SCBA and protective clothing.

## SECTION 6 — ACCIDENTAL RELEASE MEASURES

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

**Spills and Leaks** Shut off all ignition sources, no flares, smoking or flames in area. Wear self-contained breathing apparatus and full protective clothing. Soak up with noncombustible absorbent material and place into container for disposal later. 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

<b>Engineering Controls</b>	None required
<b>Personal Protective Equipment(PPE)</b>	
<b>Respiratory protection</b>	None required where adequate ventilation conditions exists. If airborne concentration is high, use a chemical cartridge respirator.
<b>Ventilation</b>	Perform test only in a well-ventilated area.
<b>Protective gloves</b>	Always wear rubber gloves when performing the HYDROSCOUT test.
<b>Eye protection</b>	Wear safety glasses.
<b>General Hygiene Measures</b>	Wash after running tests

## SECTION 9 --- PHYSICAL/CHEMICAL CHARACTERISTICS

<u>Property</u>	<u>Calcium Hydride/Arom Hydrocarbons</u>	<u>Water/Propylene Glycol</u>	<u>Diglyme</u>	<u>Reagent Alcohol</u>
<b>Boiling Pt.°C</b>	NA/153.3 - 168.3	100/188	163	78
<b>Vapor Pressure mm Hg @ 21°C</b>	NA/3.00	17.5/0.08	1.7	44
<b>Solubility in Water</b>	decompose/negligible	100%/100%	100%	miscible
<b>Specific Gravity</b>	1.90/0.876	1.00/1.036	0.95	0.79
<b>Percent Volatile</b>	NA/100	none	100	99
<b>Evaporation Rate Butyl Acetate =1</b>	NA/25.00	NA	0.36	2.7
<b>Appearance</b>	gray liquid/clear, colorless	green clear	colorless	colorless
<b>Odor</b>	none/aromatic, strong	odorless	ether-like	pleasant

N/A = not available

## SECTION 10 — REACTIVITY DATA

**Stability** All components are stable.

**Incompatible With** Strong oxidizing agents, strong acids, some alcohols, halogens, and water.

**Hazardous Decomposition Productions** Hydrogen, calcium oxide, carbon monoxide, and carbon dioxide.

**Hazardous Polymerization** Will not occur.

**Conditions to Avoid** Heat, sparks, flame and other sources of ignition, moisture and humidity. Diglyme may form peroxides on exposure to air.

## 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**

<u>Component</u>	<u>Contents</u>	<u>TLV/(PEL)</u>
<i>Gray Ampule</i>	[Calcium Hydride] in arom. Hydrocarbons	NA 100 ppm/(100 ppm)
<i>Green Ampule</i>	Water & [Propylene glycol]	NA NA
<i>Black-Capped Vials (Dilution Kit Only)</i>	Diglyme	5 ppm
<i>Extraction Solvent Ampule (Soil Kit Only)</i>	Reagent Alcohol	1900 mg/m <sup>3</sup> /(1900 mg/m <sup>3</sup> )

## SECTION 12 — ECOLOGICAL INFORMATION

No data available

## SECTION 13 — DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable federal, state and local environmental regulations.

## SECTION 14 — TRANSPORTATION INFORMATION

### DOT

**Proper Shipping Name:** None  
**Non-Hazardous for Transport:** As originally packaged by Dexsil Corporation under small quantity exemption Approval CA-9610010. Packaging conforms to conditions and limitations specified in 49 CFR 173.4.

### IATA

**Proper Shipping Name:** Calcium Hydride  
**IATA UN Number:** 1404  
**Hazard Class:** 4.3  
**Packing Group:** I

## SECTION 15 — REGULATORY INFORMATION

### United States Regulatory Information

**SARA Listed:** HI SOL 10 and diglyme, methanol component in reagent alcohol are identified on SARA Sec. 313.

**TSCA Inventory Items:** HI SOL 10, diglyme, methanol component in reagent alcohol and calcium hydride.

**CERCLA Listed:** HI SOL 10 and methanol component in reagent alcohol.

## SECTION 16 — OTHER INFORMATION

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, ITS 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.*

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