

Safety Data Sheet

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by
Regulation (EU) No 830/2015

Revision 2, Replaces Rev. 1

Revised: March 2019

HYDROSCOUT SOIL REAGENTS

SECTION 1: Identification of the substance/mixture and the company/undertaking

1.1. Product identifier

Product Description: The HYDROSCOUT product line is an On-Site test kit for quantifying water in hydrocarbon and soil matrices. The soil reagents are a reagent alcohol based extraction solvent system to be used with the HYDROSCOUT analyzer.

This product is a mixture. For identification of the individual components, see section 3.

1.2. Relevant identified uses of the substance or mixture and uses against

This product contains prepackaged reagents for the analysis of oil or soil samples for water contamination.

1.3. Details of the supplier of the safety data sheet

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

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

Importer: ETI Umwelttechnik AG
Kalchbuhlstrasse 18
7007 Chur, Switzerland

Telephone Number: (081) 253 54 54
Email: info@eti-swiss.com

1.4. Emergency telephone number

USA (800) 424-9300 (CHEMTREC) SWITZERLAND (435) 08 20 11

Section 2: Hazards Identification

2.1. Classification of the substance or mixture

Extraction Solvent(soil kit): Ethanol			
Flammable liquid 2;H225	Highly Flammable liquid and vapor.	Eye Irritant 2;H319	Causes serious eye irritation.

2.2. Label elements

Extraction Solvent (soil kit): Ethanol



Danger

H225 Highly flammable liquid and vapor.
H319 Causes serious eye irritation.

[Prevention]:

P210 Keep away from heat / sparks / open flames / hot surfaces - No smoking.

P241 Use explosion-proof electrical / ventilating / light / equipment.

P280 Wear protective gloves / eye protection / face protection.

[Response]:

P303+361+353 IF ON SKIN (or hair): Remove / Take off immediately all contaminated clothing. Rinse skin with water / shower.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+313 If eye irritation persists: Get medical advice/ attention.

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.

[Disposal]:

P501 Dispose of contents / container in accordance with local / national regulations.

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

Section 3: Composition/information on ingredients

3.2. Mixtures

The HYDROSCOUT Soil Reagents consist of a break-top ampule containing reagent alcohol and a 50-ml sample tube.

Component	Contents	CAS#	EC#	% liquid
Extraction Solvent (soil kit)	Ethanol ¹	64-17-5	200-578-6	90.5%
	Isopropanol ¹	67-63-0	200-661-7	4.98%
	Methanol ¹	67-56-1	200-659-6	4.52%
Total				100%

¹A REACH registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.

Section 4: First aid measures

4.1. Description of 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.

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.

4.2. Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3. Indication of any immediate medical attention and special treatment needed

No data available.

Section 5: Firefighting measures

5.1. Extinguishing media

Extinguishing Media

Use dry chemical, water spray, alcohol resistant foam or CO₂.

Special Fire Fighting Procedures

Wear SCBA. Avoid breathing fumes that will form on combustion.

5.2. Special hazards arising from the substance or mixture

Carbon dioxide (CO₂) and Carbon monoxide may be liberated

5.3. Advice for firefighters

Wear SCBA. Avoid breathing fumes that will form on combustion.

5.4. Further information

No data available

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment incl., chemical safety glasses and rubber gloves. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations.

6.2. Environmental precautions

HS-Soil Reagents EU(ETI)

Keep out of drains and surface water.

6.3. Methods for material containment and cleaning up

Contain spillage and then collect with non-combustible absorbent material. Store in a well ventilated area away from moisture.

Section 7: Handling and storage

7.1. Precautions for safe handling

Wear appropriate safety equipment when performing the test on site.

7.2. Conditions for safe storage, including any incompatibilities

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

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2, no other specific uses are stipulated.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Components with work place control parameters

Ethanol: GESTIS – LTV: 960 mg/m³ – 500 ppm, STV: 1920 mg/m³ – 1000 ppm

Isopropanol: GESTIS – LTV: 500 mg/m³ – 200 ppm, STV: 1000 mg/m³ – 400 ppm

Methanol: GESTIS – LTV: 250 mg/m³ – 200 ppm, STV: 350 mg/m³ – 250 ppm

8.2. Exposure controls

Engineering Controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the work day.

Personal Protective Equipment (PPE)

Respiratory protection	None required during normal use.
Ventilation	Perform test only in a well-ventilated area.
Protective gloves	Always wear rubber gloves when performing the test.
Eye protection	Wear safety glasses.
General Hygiene Measures	Avoid contact with skin, eyes and clothing. Wash after running tests.

Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<u>Property</u>	<u>Reagent Alcohol</u>
Boiling Pt.°C	78
Vapor Pressure mm Hg @ 21°C	44
Solubility in Water	miscible
Specific Gravity	0.79
Percent Volatile	99
Evaporation Rate Butyl Acetate =1	2.7
Appearance	colorless
Odor	pleasant

N/A = not available
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Section 10: Stability and reactivity

10.1. Reactivity

No data available.

10.2. Chemical stability

All components are stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

No data available.

10.4. Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from heat.

10.5. Incompatible materials

Oxidizing agents, sodium, magnesium.

10.6. Hazardous decomposition products

Solutions are stable.

Section 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Ethanol: Shall not be classified as acutely toxic.

Inhalation (vapor): LC50 95.6 mg/L, 4h (rat)

Oral: LD50 7,060 mg/kg (rat)

Isopropanol: Based on available data, the classification criteria are not met.

Inhalation: LC50 72.6 mg/L, 4h (rat)

Dermal: LD50 12,870 mg/kg (rabbit)

Dermal: LD50 13,900 mg/kg (rat)

Oral: LD50 5,840 mg/kg (rat)

Methanol: Classification according to GHS (1272/2008/EC, CLP): Toxic if swallowed, in contact with skin or inhaled.

Inhalation (vapor): LC50 128,200 mg/m³, 4h (rat)

Inhalation (vapor): LC50 85,400 mg/m³, 4h (cat)

Dermal: LD50 17,100 mg/kg (rabbit)

Oral: LD50 >7 mg/kg (monkey)

Oral: LD50 >1,187 mg/kg (rat)

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

Shall not be classified as a reproductive toxicant.

Methanol: Fertility:

NOAEC (Rat) = 1.3 mg/L

NOAEC (Monkey) = 2.39 mg/L

NOAEL(Oral) Sperm = 1000 mg/kg bw/day

Developmental Toxicity:

NOAEC (Rat) = 1.33 mg/L

LOAEL (Mouse) = 1700 mg/kg

Developmental Toxicity:

NOAEC (Rat, Mouse) = 1.33 mg/L
LOAEL(Mouse) = 5000 mg/kg.

Specific target organ toxicity - single exposure

Isopropanol: Causes damage to the central nervous system
Hazard category: 3; target organ – central nervous system.

Methanol: Causes damage to organs (eye, heart, brain, liver, central nervous system. Exposure route: Oral, Inhalation.
Hazard category: 1; target organ – liver, if swallowed; heart, if inhaled; brain, if inhaled; liver, if inhaled; CNS, if swallowed.

Specific target organ toxicity - repeated exposure

Methanol: Shall not be classified as a specific target organ toxicant (repeated exposure)
LOAEL (oral): 2,340 mg/kg, 3d
NOAEL (inhalation: vapor): 13 mg/m³, 7mth

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

Additional information

No data available.

Section 12: Ecological information

12.1. Toxicity

Ethanol

Toxicity to fish: LC50 >10,000 mg/L (Oncorhynchus mykiss, 96h)
LC50 >13,400 mg/L (Pimephales promelas, 96h)
Toxicity to aquatic plants: Growth inhibition: 1,000 mg/L (Chlorella vulgaris, 96h)
Toxicity to microorganisms: Toxicity threshold: 6,500 mg/L (Pseudomonas putida) Inhibition of cell multiplication begins

Isopropanol

Toxicity to fish: LC50: > 1400000 µg/L, 96h (Lepomis macrochirus)
LC50: = 9640 mg/L, 96h flow-through (Pimephales promelas)
LC50: = 11130 mg/L, 96h static (Pimephales promelas)
Toxicity to Water Flea: EC50 = 13,299 mg/L, 48h; EC50 = 9,714 mg/L, 24 h
Toxicity to aquatic plants: EC50: > 1,000 mg/L, 72h (Desmodesmus subspicatus)
EC50: > 1000 mg/L, 96h (Desmodesmus subspicatus)
Microtox: EC50 = 35,390 mg/L, 5 min (Photobacterium phosphoreum)

Methanol

Toxicity to fish: LC50: = 15,400 mg/L, 96h
EC50: = 12,700 mg/L, 96h

12.2. Persistence and degradability

Expected to be biodegradable

12.3. Bioaccumulative potential

Bioaccumulation unlikely

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

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.

12.6. Other adverse effects

No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Dispose of in accordance with all applicable federal, state and local environmental regulations. Do not empty into drains.

Section 14: Transportation information

In accordance with ADR / RID / IMDG / IATA

14.1. UN number 1987

14.2. UN proper shipping name

Alcohols, n.o.s. (Ethanol, Isopropanol)

As packaged, this item ships as non-hazardous: **Dangerous Goods in Excepted Quantities**

14.3. Transport hazard class(es) 3

14.4. Packing group II

14.5. Environmental hazards No

14.6. Special precautions for user Transport by sea EMS: F-E, S-D

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

The cargo is not intended to be carried in bulk.

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

This SDS complies with the requirements of Regulation (EC) No. 1907/2006.

Components of this product are on the following inventories or are exempted from listing.

AICS, IECS, IECSC, DSL, EINECS, ENC/ISHL, KECL, ECL, PICCS, TSCA

Swiss Regulatory Information:

Federal Act on Protection against Dangerous Substances and Preparations (Chemicals Act, ChemA) of 15 December 2000 (Status as of 13 June 2006) SR 813.1

Ordinance on Protection against Dangerous Substances and Preparations (Chemicals Ordinance, ChemO) of 18 May 2005 (Status as of 15 July 2014) 813.11

Ordinance on the Reduction of Risks relating to the Use of Certain Particularly Dangerous Substances, Preparations and Articles (Chemical Risk Reduction Ordinance, ORRChem) of 18 May 2005 (Status as of 1 January 2014) SR 814.81

Federal Act on the Protection of the Environment (Environmental Protection Act, EPA) of 7 October 1983 (Status as of 1 July 2014) 814.01

Fifth Ordinance on the federal Act about Work (Occupational Safety For The Youth) ArGV 5 of 28 September 2007 (Status as of 1 August 2014) SR 822.115.2

Ordinance from the department of Economy, Education and Research on dangerous and difficult chores during pregnancy and maternity (Maternity Protection Ordinance) of 20 March 2001 (Status as of 1 January 2013) SR 822.111.52

Ordinance from the department of Environment, Traffic, Energy and Communications about Lists on the traffic of waste of 18 October 2005 (Status as of 1 January 2010) SR 814.610.1

Federal Act on Work in Industry, Trade and Commerce (Federal Act on Work) of 13 March 1964 (Status as of 1 December 2013)

15.2 Chemical safety assessment

For this product a chemical safety assessment was not carried out.

Section 16: Other information

The information in this Safety Data Sheet meets the requirements of Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No 830/2015. 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 HS-Soil Reagents EU(ETI)

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 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.

For additional information, contact Dexsil.