



## IT'S SO EASY TO USE... EASY TO DISPOSE... JUST POUR... AND SWEEP...

### Example of liquids absorbed by GreenSorb™:

- Oils (all sorts, types and viscosity)
- Fuels (gasoline, jet fuel, diesel)
- Acids (except Hydrofluoric acid)
- Solvents
- Grease
- Medical fluids
- Toxins
- Blood & urine
- Caustic fluids
- Alcohols
- Paint
- Sewage

Saves time and money...

Non-toxic, non-flammable, non-reactive,  
non-corrosive, non explosive, non-oxidizing,  
all natural. Can be disposed of in landfills.

- ✓ U.S. EPA accepted
- ✓ HAZMAT safe
- ✓ OSHA accepted
- ✓ U.S. Dept of Agriculture accepted
- ✓ U.S. Dept of Energy accepted
- Absorbs 7 times more than ordinary clay absorbents according to our largest customers
- Non-leaching, more than 99% retention (TCLP tested to EPA guidelines)
- Safe to use on all liquids (except hydrofluoric acid)

GreenSorb™ creates a cleaner, safer and Eco-Friendly environment in a variety of applications in retail, municipal, public and private environments from garages, warehouses, workshops, production areas, supermarket stores, hospitals, hotels, storage rooms, schools, restaurants, airports, factories, parking lots and garages.



**GREENSORB™**

# All Purpose Uses

## Industrial

Factories  
Machine Shops  
Oil Refineries  
Oil Fields  
Steel Mills

## Environmental

Brown Fields  
Gas Stations  
LUST  
Oil Spills  
Hazmat Spills  
Beaches  
Animal Clean-up

## Recreational

Bilge kits  
Horse Racing tracks  
Auto Racing tracks

## Household

Kitchen oil/grease spills  
Garage oil clean-up

## Commercial

Airline Maintenance  
Truck Maintenance  
Train Maintenance  
Auto Maintenance  
Auto Parts clean-up  
Auto Repair shops  
Gas Stations  
Transmission Shops  
Harbors  
Marinas  
Bus Maintenance  
Diesel Fuel Depots  
Fuel Trucks  
Hazmat Trucks  
Fire Dept. Hazmat Response Trucks  
Lake & Ocean Vessel Bilge's

## Clean-Up

(ANIMAL FLUIDS, SMALL SPILLS)

Schools  
Hospitals  
Nursing Homes  
Home Health  
Hospice  
Airline Cabins  
Restaurants  
Bars/Taverns  
Bus Interiors  
Cruise Ship clean-up

## Clean-Up

(MAJOR SPILLS)

Crime scene clean-up  
Accident scene clean-up  
Hazmat clean-up  
Aqueous Nuclear Waste clean-up





# Save 15% or more using GREENSORB™

	GREENSORB™	Crushed Clay
Material to absorb 1 gallon of oil (SAE 40)	20 lbs	140 lbs
Cost to absorb 1 gallon of oil (SAE 40)	\$42.40	\$26.25
Disposal cost (\$0.15/lb)	Free	\$21.00
Labor, storage, and handling costs (\$0.02/lb)	\$0.40	\$2.80
Cost of material and disposal to absorb 1 gallon of oil	<b>\$42.80</b>	<b>\$50.05</b>
Efficiency - Gallons absorbed per 50 lb bag	2.5	0.30
Weekly use in lbs (50 gallons of oil cleaned/week)	1,000 lbs	7,000 lbs
Weekly cost for material	\$2,120.00	\$1,312.50
Weekly disposal cost (\$0.15/lb)	Free	\$1,050.00
Weekly labor, storage, and handling costs (\$0.02/lb)	\$20	\$140.00
Total Weekly Spend	<b>\$2,140.00</b>	<b>\$2,502.50</b>
Annual use in lbs (50 gallons of oil cleaned/week)	50,000 lbs	350,000 lbs
Annual cost for material	\$106,000.00	\$65,625.00
Annual disposal cost (\$0.15/lb)	Free	\$52,500.00
Annual labor, storage, and handling costs (\$0.02/lb)	\$1,000.00	\$7,000.00
Total Annual Spend	<b>\$107,000.00</b>	<b>\$125,125.00</b>
Annual Savings	<b>\$18,125.00</b>	
Annual Waste Reduction	<b>300,000 lbs</b>	

**Assumptions:**

- 1) Using GreenSorb™ list price for 50 lb Bag or \$2.12/lb - purchasing in volume significantly reduces this price and increases the savings
- 2) Weight of spilled items: Motor oil = 8 lbs/gal and Aviation Gas = 6 lbs/gal
- 3) Top 5 Airlines tested GreenSorb™ for 1 year and found our product to be 7 times more absorbant than crushed clay
- 4) GreenSorb™ test - worst case requires 2.5 lbs of GreenSorb™ to absorb 1 lb spill
- 5) Using crushed clay price of \$9.38 for 50 lbs or \$0.1875/lb
- 6) Disposal + storage/labor fees taken from generally available information from the top 5 U.S. Environmental Service companies - figures used in calculations are lowest (conservative) found.





## Anti-Leaching Process

### Comparison of Amorphous Silicate vs. **GREENSORB™**

Both absorbents (Amorphous Silicate and GreenSorb™) are placed on a clean sheet of white copy paper to test their ability to retain (anti-leaching action) the absorbed oil. As it can be seen amorphous Silicia releases some oil after 15 minutes. GreenSorb™ retains all of the absorbed oil.

Top left image is taken after 24 hours have lapsed and again it shows amorphous Silicate releasing the absorbed oil. GreenSorb™ completely retains it.



Amorphous Silicate leaks the absorbed oil after 15 minutes, and continues to leak after 24 hours!



GreenSorb™ does not release any absorbed oil, an indication of its superior anti-leaching property.

### Comparison of Clay Absorbents vs. **GREENSORB™**

Both absorbents (Clay based absorbent and GreenSorb™) are placed on a clean sheet of white copy paper to test their ability to retain (anti-leaching action) the absorbed oil. As it can be seen Clay based absorbent releases some oil after 15 minutes. GreenSorb™ retains all of the absorbed oil.

Top left image is taken after 24 hours have lapsed and again it shows Clay based absorbent releasing the absorbed oil. GreenSorb™ completely retains it.



Clay Absorbent leaks the absorbed oil after 15 minutes, and continues to leak after 24 hours!



GreenSorb™ does not release any absorbed oil, an indication of its superior anti-leaching property.



## Comparison Matrix Chart

		Total Encapsulation	Green	Bio-Remediation	Eliminate Disposal Process
	<b>GREENSORB™</b> Proprietary Cocktail of Earth Materials	YES	YES	NO	YES
	Amorphous Alumina Silicate	NO	NO	YES	NO
	Plant by-product	YES	YES	NO	YES
	Silica Clay	NO	NO	YES	NO
	Corn Cob	NO	YES	YES	NO
	Volcanic Ash	NO	YES	YES	NO
	Sphag-Moss	NO	YES	YES	NO





**GREENSORB™**

## Research

GreenSorb™ passed all tests and exceeded testing guidelines, standards, and requirements for safety and cleanup of spills.

### Illinois Institute of Technology

Testing determined that our products were able to absorb any hydrocarbon, petro chemical, or hazardous material except hydrofluoric acid. It also determined the optimum formula and production configuration.

### Northwestern University

Initial research performed to determine its uses world wide, in all climates, in all types of salt water for oil spill applications, and even secondary applications after absorption hydrocarbons such as road building instead of disposal. Various types of cooking oils were also addressed and tested.

### University of Illinois

Researched applications used on animal body fluids, i.e. fats, oils, greases, urine, feces, blood, and vomit. This work also included anti-slippage qualities as well as absorption qualities to determine its safety capabilities. These experiments determined its uses in the food processing industry and restaurant applications within OSHA guidelines.

### United States Dept of Agriculture

Based on the results of the above experiments at the University of Illinois, our product has USDA approval for use in meat and chicken packing plants and the food industry in general.

### United States Dept of Energy

#### Argonne National Laboratory

In order to achieve a Hanford National Laboratory requirement that a product must pass a 20 pound external pressure test to be considered for mixed waste. We doubled this requirement and had Argonne National Laboratory conduct a 40 pound external pressure test on our product.

Argonne used three different types of materials of their own choosing and once again, our products passed with flying colors. The U.S. Department of Energy's Argonne National Laboratory is operated under the auspices of the University of Chicago.

#### Hanford National Laboratory

Based on the results of the testing by Argonne National Laboratory, GreenSorb™ was placed on the approved list of the Hanford Site Solid Waste Acceptance Program. This means GreenSorb™ is now qualified to absorb aqueous nuclear materials.





# Material Safety Data Sheet

<b>Manufacturer:</b>	Sorbent Green LLC 200 S. Wacker Drive, Suite 1500 Chicago, IL 60606	Date Prepared: January 2010
<b>Phone:</b>	(800) 259-3577	
<b>Facsimile:</b>	(312) 348-6293	

## SECTION I. MATERIAL IDENTIFICATION

<b>Identity:</b>	Floor Absorbent - GreenSorb™
<b>Chemical Family:</b>	Montmorillonite
<b>DOT Classification:</b>	Not Regulated

## SECTION II. INGREDIENTS AND HAZARDS

### Contains Crystalline Silica (As quartz)

1. No subject reporting requirements under SARA, Title III, Section 313
2. ACGIH - Respirable Dust
3. IARC has determined that there is limited evidence for the carcinogenicity of crystalline silica to humans involved in occupations such as miners, quarry workers, foundry workers, ceramic workers, granite workers, and stone cutters. However, crystalline silica in the respirable range is below the OSHA concentration limit of 0.1%. Additionally, applications data indicates that respirable quartz in this product is well below the OSHA permissible exposure limit (PEL) and the ACGIH threshold limit value (TLV): both values are listed as 0.1 mg/m (time weighted averages). Therefore this material is considered NOT HAZARDOUS.

\* Contains crystalline silica, silicon alloys, and compounds (as Si), quartz, magnesite, fluorides, iron, and nonreportable traces of manganese and/or manganese alloys and compounds (as Mn)

## SECTION III. PHYSICAL AND CHEMICAL CHARACTERISTICS

<b>Boiling Point:</b>	N/A	<b>Specific Gravity (H<sub>2</sub>O=1):</b>	See Bulk Density
<b>Vapor Pressure (mm Hg)</b>	N/A	<b>Evaporation Rate:</b>	N/A
<b>Vapor Density (Air=1)</b>	N/A	<b>Melting Point:</b>	N/A
<b>Water Solubility:</b>	Negligible	<b>Bulk Density:</b>	38-39 lbs/cft
<b>Appearance &amp; Odor:</b>	Reddish Brown, flat, musty odor.		

## SECTION IV. FIRE AND EXPLOSION DATA

<b>Flammability:</b>	Not Combustible
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# Material Safety Data Sheet

## SECTION V. REACTIVITY DATA

**Stability:** Stable

**Incompatibility:** Under uncommonly dry conditions temperature build up may occur with certain solvents and vegetable oils. Do not use with hydrofluoric acid.

**Hazardous Decomposition or By-Product:** None

**Hazardous Polymerization:** Will not occur

## SECTION VI. HEALTH HAZARD INFORMATION

**Inhalation:** Based on limited evidence, crystalline silica is classified by IARC in Group 2A, "Probably carcinogenic to humans". Crystalline silica, including quartz, is present in many mineral products.

**Signs and Symptoms of Exposure:** N/A

**Medical Conditions Generally Aggravated by Exposure:** N/A

**Emergency and First Aid Procedures:** No special procedures required

## SECTION VII. PRECAUTIONS FOR SAFE HANDLING AND USE

**Steps to be taken in case material is released or spilled:** Vacuum or sweep up.

**Waste Disposal Method:** Dispose of in accordance with state and local laws.

**Precautions to be taken in handling and storage:** N/A

**Other protective clothing or equipment:** N/A

**Work/Hygienic Practices:** Normal good work and safety practices

## SECTION VIII. CONTROL MEASURES

**Respiratory Protection:** General NIOSH approved dust respirator in working with large quantities.

**Ventilation:** Normal exhaust

**Protective Gloves:** N/A

**Other protective clothing or equipment:** N/A

**Work/Hygienic Practices:** Normal good work and safety practices

Sorbent Green LLC makes no warranty, express or implied, with respect to the product and its uses, including, but not limited to, no implied warranty of merchantability and no warranty of fitness for a particular purpose, and Sorbent Green LLC assumes no responsibility for any liability or risk arising from the use of any GreenSorb product or any GreenSorb product information.





# Tested Safe

## Tests for Toxicity Characteristic Leaching Procedure (TCLP)

The US Environmental Protection Agency (EPA) establishes specific & definite criteria to determine if solid waste should be considered hazardous. Waste or spills that are classified as hazardous are generally harmful to human life and the environment. The rules and regulations concerning the storage, shipment, treatment and legal disposal of hazardous waste apply...and compliance is often very expensive.

U.S. EPA TCLP Test Standards		Results		
Compound	(mg/L)	Test 1	Test 2	Test 3
O-Cresol	200.02		<0.20	<0.20
m,p - Cresol	200.02		<0.20	<0.20
1,4 Dichlorobenzene	7.5	<0.005	<0.10	<0.10
2,4 Dinitrotoluene	0.133		<0.10	<0.10
Hexachlorobenzene	0.133		<0.10	<0.10
Hexachlorobutadiene	0.5		<0.10	<0.10
Hexachloroethane	3.0		<0.10	<0.10
Nitrobenzene	2.0		<0.10	<0.10
Pentachlorophenol	100.0		<0.50	<0.50
Pyridine	5.03		<0.10	<0.10
2,4,5-Trichlorophenol	400.0		<0.10	<0.10
2,4,6-Trichlorophenol	2.0		<0.10	<0.10
Benzene	0.5	<0.005	<0.10	<0.10
Carbon tetrachloride	0.5	<0.005	<0.10	<0.10
Chloroform	6.0	<0.005	<0.10	<0.10
1,2-Dichloroethane	0.5	<0.005	<0.10	<0.10
1,1-Dichloroethane	0.7	<0.005	<0.10	<0.10
Methyl ethyl ketone	200.0	<0.010	<1.00	<1.00
Tetrachlorethane	0.7	<0.005	<0.10	<0.10
Trichlorethane	0.5	<0.005	<0.10	<0.10
Vinyl chloride	0.2	<0.005	<0.10	<0.10
Arsenic	5.0		<1.00	<1.00
Barium	100.0		<1.00	<1.00
Cadmium	1.0		<0.021	<0.020
Chromium	5.0		<0.020	<0.020
Lead	5.0		<0.100	<0.100
Mercury	0.2		<0.0010	<0.0010
Selenium	1.0		<0.400	<0.400
Silver	5.0		<0.0200	<0.0200

Laboratory	Location	Test Number	Date Conducted	Sponsored by
Enviro-Test/Perry Labs	Chicago, IL	Test 1	August 9, 1996	Aviation Customer
Inchcape Testing Services	Dallas, TX	Test 2 & 3	October 25, 1996	Petro-Chemical Customer

The three separate field tests featured were performed by independent labs. GreenSorb™ was used in removing petroleum based liquid comprised of water, gas, diesel fuel, and transmission fluid. The conclusion is that GreenSorb™ safely absorbed the spill, and the spill was completely absorbed into the GreenSorb™... now dry. The GreenSorb™ with absorbed waste was found to be non-hazardous material in accordance with the Resource Conservation and Recovery Act (RCRA). This meant that it could be disposed of as a regular, non-hazardous waste product at a significant cost savings!



# UNIVERSAL LABORATORIES

20 Research Drive Hampton, Va 23666

1-800-895-2162

(757) 865-0860

Fax: (757) 865-8014

E-mail: info@universallaboratories.net

Date: Wednesday, October 13, 2010

Pages: Page 1 of 3

To:

Myriad Greeyn Energy

Fax#: (806) 498-3604

Email:

From:

Subject: Results for Project Product Testing  
designated as UL Order Id 1009423 and received on  
Wednesday, September 22, 2010





# UNIVERSAL LABORATORIES

20 Research Drive Hampton, Va 23666

Order ID: **1009423**

## REPORT OF ANALYSIS

(REPORT DATE)

13-Oct-10

TELEPHONE: (757) 865-0880  
TOLL-FREE: (800) 866-2162  
FAX: (757) 865-8014

TO: **Myriad Greeyn Energy**  
2342 Croix Drive  
Virginia Beach Va 23451

ATTN:

Project ID: Product Testing  
Project # N/A

Site: Paint Waste From

Matrix: Liquid

Comments for Order:

UL Sample Number: **1009423-001**

Sample ID: Paint Waste From

Grab Date/Time: 9/22/2010

Composite Start: N/A

Composite Stop: N/A

Collected By: Client

Parameter	Method	Test Result	Units	UL Report Limit	Analysis Date/Time	Analyst
Absorption Ratio	Manual	2.55:1 Greensorb : Sample			9/22/2010 13:32:00	SS
Pyridine (TCLP)	SW-846 1311/ 8270 D	<	mg/L	0.02	10/1/2010 04:35:00	BD
Hexachloroethane (TCLP)	SW-846 1311/ 8270 D	<	mg/l	0.02	10/1/2010 04:35:00	BD
Total Cresols (TCLP)	SW-846 1311/ 8270 D	<	mg/L	0.02	10/1/2010 04:35:00	BD
Nitrobenzene (TCLP)	SW-846 1311/ 8270 D	<	mg/L	0.02	10/1/2010 04:35:00	BD
Hexachlorobutadiene (TCLP)	SW-846 1311/ 8270 D	<	mg/L	0.02	10/1/2010 04:35:00	BD
2,4,6-Trichlorophenol (TCLP)	SW-846 1311/ 8270 D	<	mg/L	0.02	10/1/2010 04:35:00	BD
2,4,5-Trichlorophenol (TCLP)	SW-846 1311/ 8270 D	<	mg/L	0.02	10/1/2010 04:35:00	BD
2,4-Dinitrotoluene (TCLP)	SW-846 1311/ 8270 D	<	mg/L	0.02	10/1/2010 04:35:00	BD
Hexachlorobenzene (TCLP)	SW-846 1311/ 8270 D	<	mg/L	0.02	10/1/2010 04:35:00	BD
Pentachlorophenol (TCLP)	SW-846 1311/ 8270 D	<	mg/L	0.02	10/1/2010 04:35:00	BD
Arsenic (TCLP)	SW-846 1311/6010 C	<	mg/L	0.005	9/24/2010 09:47:00	LS
Barium (TCLP)	SW-846 1311/6010 C	0.593	mg/L	0.005	9/24/2010 09:47:00	LS
Cadmium (TCLP)	SW-846 1311/6010 C	<	mg/L	0.005	9/24/2010 09:47:00	LS
Chromium (TCLP)	SW-846 1311/6010 C	<	mg/L	0.005	9/24/2010 09:47:00	LS
Lead (TCLP)	SW-846 1311/6010 C	0.009	mg/L	0.005	9/24/2010 09:47:00	LS
Selenium (TCLP)	SW-846 1311/6010 C	<	mg/L	0.005	9/24/2010 09:47:00	LS
Silver (TCLP)	SW-846 1311/6010 C	<	mg/L	0.005	9/28/2010 09:46:00	LS

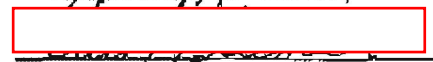


Mercury (TCLP)	SW-846 1311/7470	0.0091	mg/L	0.0002	9/24/2010 10:10:00	EK
Lindane (TCLP)	SW-846 1311/8081 B	<	mg/L	0.005	10/5/2010 16:23:00	BD
Heptachlor (TCLP)	SW-846 1311/8081 B	<	mg/L	0.005	10/5/2010 16:23:00	BD
Heptachlor Epoxide (TCLP)	SW-846 1311/8081 B	<	mg/L	0.005	10/5/2010 16:23:00	BD
Endrin (TCLP)	SW-846 1311/8081 B	<	mg/L	0.005	10/5/2010 16:23:00	BD
Methoxychlor (TCLP)	SW-846 1311/8081 B	<	mg/L	0.02	10/5/2010 16:23:00	BD
Chlordane (TCLP)	SW-846 1311/8081 B	<	mg/L	0.02	10/5/2010 16:23:00	BD
Toxaphene (TCLP)	SW-846 1311/8081 B	<	mg/L	0.05	10/5/2010 16:23:00	BD
Vinyl Chloride (TCLP)	SW-846 1311/8260 B	<	mg/L	0.2	10/11/2010 20:56:00	ES
1,1-Dichloroethylene (TCLP)	SW-846 1311/8260 B	<	mg/L	0.2	10/11/2010 20:56:00	ES
Chloroform (TCLP)	SW-846 1311/8260 B	<	mg/L	0.2	10/11/2010 20:56:00	ES
Carbon Tetrachloride (TCLP)	SW-846 1311/8260 B	<	mg/L	0.2	10/11/2010 20:56:00	ES
1,2-Dichloroethane (TCLP)	SW-846 1311/8260 B	<	mg/L	0.2	10/11/2010 20:56:00	ES
Methyl ethyl ketone (TCLP)	SW-846 1311/8260 B	0.7	mg/L	0.2	10/11/2010 20:56:00	ES
Benzene (TCLP)	SW-846 1311/8260 B	<	mg/L	0.2	10/11/2010 20:56:00	ES
Trichloroethylene (TCLP)	SW-846 1311/8260 B	<	mg/L	0.2	10/11/2010 20:56:00	ES
Tetrachloroethylene (TCLP)	SW-846 1311/8260 B	<	mg/L	0.2	10/11/2010 20:56:00	ES
Chlorobenzene (TCLP)	SW-846 1311/8260 B	<	mg/L	0.2	10/11/2010 20:56:00	ES
1,4-Dichlorobenzene (TCLP)	SW-846 1311/8260 B	<	mg/L	0.2	10/11/2010 20:56:00	ES

Comments for Sample I 1009423-001

No comments

Respectfully Submitted,



# CHAIN-OF-CUSTODY



# UNIVERSAL LABORATORIES

Company Myriad Green  
 Street/Box 2342 Croix Drive  
 City/State Var. Beck, VA 23451  
 Phone 800-659-9281 Fax 806-498-3604  
 Contact:  
 Job No. / P.O. No.

20 Research Drive  
 Hampton, VA 23666

Phone: (757) 865-0880  
 Fax: (757) 865-8014

Sample ID	Date/Time	Sampled By	Matrix	Sample Type	Field Notes	Analysis Required										Log Number	
						Preservative	None	Preservative	Full TCLP	Preservative	Preservative	Preservative	Preservative	Preservative	Preservative		Preservative
<u>Paint Waste form</u>	<u>9/20/10</u>	<u>C</u>	<u>L</u>	<u>C</u>	<u>(G)</u>	<u>2</u>	<u>*</u>										<u>1001402</u>
				C	G												
				C	G												
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				C	G												
				C	G												
				C	G												

Comments: Cooler Temp at LI N/A Pres V N/A

Possible Hazards: Disposal: Lab  Client  Charge

Due Date: \_\_\_\_\_  
 Express Service: \_\_\_\_\_  
 Express Service Approval: \_\_\_\_\_

Relinquished By	Signature	Company	Date/Time	Work Order No.
Received By	Signature	Company	Date/Time	Delivery Order
Relinquished By	Signature	Company	Date/Time	Trans <input type="checkbox"/> P.U. <input type="checkbox"/> Grab <input type="checkbox"/> Comp <input type="checkbox"/>
Received By	Signature	Company	Date/Time	Shipping/Delivery Charges
Relinquished By	Signature	Company	Date/Time	Composite Start / Composite Stop
Received By	Signature	Company	Date/Time	

\* sample sent for TCLP after mixed with Green sorb. ss 9/20/10

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