

## Hingtgen, Robert J

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**From:** Donna Tisdale <tisdale.donna@gmail.com>  
**Sent:** Monday, January 12, 2015 12:45 PM  
**To:** Gungle, Ashley; Bennett, Jim  
**Cc:** Hingtgen, Robert J; Fogg, Mindy; Mecham, Tony@CALFIRE; Croucher, Gary@CALFIRE; Zingheim, Kurt; Mark Ostrander  
**Subject:** Soitec FEIR-Soil Binder flammability  
**Attachments:** gorilla-snot-materials-data-sheet.pdf; Soitec Newberry Springs 3-14-14 040.JPG

Hello Ashley,

I reviewed the MSDS sheet that Jim forwarded for Envirotac II, aka Rhino Snot. During Jim's Jan 8th presentation, he remarked on previous public comments regarding soil binder flammability issues, stating that Soitec's soil binder is non-flammable.

For the record, please note that the Envirotac II MSDS sheet does not include any fire safety data similar to the Fire and Explosion data included in the attached Gorilla Snot soil stabilizer MSDS, Section 5, copied below, which raises questions:

### **"SECTION 5 - FIRE AND EXPLOSION DATA**

FLASH POINT (closed cup) Not applicable

UPPER EXPLOSION LIMIT (UEL) Not applicable

LOWER EXPLOSION LIMIT (LEL) Not applicable

AUTOIGNITION TEMPERATURE Not applicable

FIRE HAZARD CLASSIFICATION (OSHA/NFPA) Non-Combustible

#### **EXTINGUISHING MEDIA**

Product does not burn. The product will only burn after the water it contains is driven off. For dry polymer use carbon dioxide, foam, dry

chemical or water fog to extinguish fire. Aqueous solution is not flammable.

#### **FIRE FIGHTING EQUIPMENT**

Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing. Thoroughly decontaminate all protective equipment after use.

#### **FIRE FIGHTING INSTRUCTIONS**

Containers of this material may build up pressure if exposed to heat (fire). Use water spray to cool fire-exposed containers.

#### **FIRE AND EXPLOSION HAZARDS**

This material will not burn unless it is evaporated to dryness. Closed containers may rupture when exposed to extreme heat.

#### **HAZARDOUS COMBUSTION PRODUCTS**

When dried polymer burns, water (H<sub>2</sub>O), carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO) and smoke are produced."

### **Remaining soil binder fire and water questions & comments:**

1. Will Soitec be using the less expensive and less effective Envirotac I or will they use Envirotac II?
2. Where is the Fire and Explosion Data for Envirotac / Rhino Snot and is it similar to the Gorilla Snot data highlighted above?

3. It makes sense that Envirotac's polymers would burn, just like the Gorilla Snot polymers, once the water they contain evaporates.
4. I have attached a close up picture of the soil binder that I witnessed being applied at Soitec's Newberry Springs project, in March of last year, showing the fibrous materials.
5. It seems obvious that they would become flammable when they dry out.
6. Fire fighters and neighbors need to be informed that a fire at either treated project site could result in similar Hazardous Combustion Products highlighted above.
7. Firefighters need to be informed that self-contained breathing apparatus and full-protective clothing may be required along with decontamination of that gear after use.
8. Envirotac II is also promoted as forming a "water proof" bond:  
<http://envirotac.com/category/introduction/>
9. Creating hundreds of acres of water proof surfaces at Rugged Solar and Tierra Del Sol Solar sites would appear to significantly reduce groundwater recharge while increasing surface runoff and erosion issues.
10. Has the amount of water required for repeated soil binder applications throughout the life of the projects, been included as part of O&M?
11. According to their FAQ sheet, the average life of the product is 12-16 months: <http://envirotac.com/faq/>

Please make sure this information is included into the Administrative Record for Soitec's FPEIR/projects.

Thanks

Donna Tisdale  
619-766-4170

On Mon, Jan 12, 2015 at 10:48 AM, Bennett, Jim <[Jim.Bennett@sdcountry.ca.gov](mailto:Jim.Bennett@sdcountry.ca.gov)> wrote:

Donna,

Here's a link to the MSDS sheet per your request:

<http://envirotac.com/wp-content/uploads/2013/06/dust-control-envirotac-MSDS.pdf>

Jim Bennett, P.G. #7707, C.Hg.#854

Groundwater Geologist

**County of San Diego**

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PDS Website <http://www.sdcounty.ca.gov/pds/index.html>

**From:** Donna Tisdale [mailto:[tisdale.donna@gmail.com](mailto:tisdale.donna@gmail.com)]  
**Sent:** Monday, January 12, 2015 10:43 AM  
**To:** Bennett, Jim; Hingtgen, Robert J; Gungle, Ashley; Fogg, Mindy  
**Subject:** Soitec soil binder info

Hello Jim,

During your January 8th Soitec Solar presentation to the Boulevard Planning Group, you made reference to Soitec providing you with the Material Data Safety Sheet (MDSS) for the soil binder they propose to use at their Boulevard projects.

Please forward a copy of that MDSS as soon as possible so that information can be reviewed and verified prior to the Planning Commission hearing.

Thank you

Donna Tisdale

[619-766-4170](tel:619-766-4170)





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 Specializing in Soil Stabilization & Dust Control

Global Manufacturer & Distributor of  
**Soiltac® / Powdered Soiltac®**  
**Durasoil® AND Gorilla Snot®**

## MATERIAL SAFETY DATA SHEET

### SECTION 1 - MATERIAL IDENTIFICATION

**PRODUCT NAME** **GORILLA-SNOT\***  
 \*GORILLA-SNOT is a registered trademark of Soilworks, LLC.

**MANUFACTURER** Soilworks, LLC.  
 2450 South Gilbert Road, Suite 210  
 Chandler, Arizona 85286-1595 USA  
[www.soilworks.com](http://www.soilworks.com)  
 800-545-5420

**TELEPHONE NUMBER** 800-545-5420  
**ONLINE INFORMATION** [www.Soilworks.com](http://www.Soilworks.com)  
**EMERGENCY TELEPHONE NUMBERS** 800-545-5420 (National & International)  
**REVISION DATE** January 2007 (*supersedes March 2006*)

**PHYSICAL FORM** Mobile liquid  
**COLOR** Milky White (transparent once cured)  
**ODOR** Mild / Slight (no odor once cured)  
**C.A.S. CHEMICAL NAME** Mixture  
**SYNONYMS** Soil stabilizer, soil stabilization agent, soil solidifier, soil amendment, soil additive, soil crusting agent, dust control agent, dust inhibitor, dust palliative, dust suppressant, dust retardant

**CHEMICAL FAMILY** Vinyl Copolymer Emulsion  
**EMPIRICAL FORMULA** Mixture  
**INTENDED USE** Soil stabilization, soil solidification, fugitive dust control, dust suppression, dust abatement, tackifier, dust abatement, PM<sub>10</sub> and PM<sub>2.5</sub> air quality control and erosion control

### SECTION 2 - INGREDIENTS

	%	CAS Number	Chemical Name
1.	20-60	Proprietary	Vinyl Copolymer
2.	80-40	7732-18-5	Water

### SECTION 3 - HEALTH HAZARDS

#### ROUTES OF ENTRY

Eye Contact, Skin Contact, Ingestion and Inhalation

#### SIGNS AND SYMPTOMS OF ACUTE EXPOSURE

Eyes: Direct contact with this material may cause eye irritation including lachrymation (tearing).  
 Inhalation: Inhalation of vapor or aerosol may cause irritation to the respiratory tract (nose, throat, and lungs).  
 Skin: Contact may cause skin irritation.  
 Ingestion: No hazard in normal industrial use.

#### SIGNS AND SYMPTOMS OF CHRONIC EXPOSURE

Prolonged or repeated contact with skin may cause irritation and dermatitis (inflammation).

#### CARCINOGENICITY

This material **does not** contain 0.1% or more of any chemical listed by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or regulated by the Occupational Safety and Health Administration (OSHA) as a carcinogen.

### SECTION 4 - FIRST AID

#### EYE CONTACT

Flush eyes with clean water for at least 15 minutes. Get immediate medical attention.

#### SKIN CONTACT

Remove contaminated clothing and shoes. Wash affected area with soap and water. Get medical attention if irritation develops or persists.

#### INHALATION

Move patient to fresh air. If breathing has stopped or is labored give assisted respiration (e.g. mouth-to-mouth). Supplemental oxygen may be indicated. Seek medical advice.

#### INGESTION

Give the victim one or two glasses of water or milk to drink. Get immediate medical attention. Never give anything by mouth to an unconscious person.



## SECTION 5 - FIRE AND EXPLOSION DATA

<b>FLASH POINT (closed cup)</b>	Not applicable
<b>UPPER EXPLOSION LIMIT (UEL)</b>	Not applicable
<b>LOWER EXPLOSION LIMIT (LEL)</b>	Not applicable
<b>AUTOIGNITION TEMPERATURE</b>	Not applicable
<b>FIRE HAZARD CLASSIFICATION (OSHA/NFPA)</b>	Non-Combustible
<b>EXTINGUISHING MEDIA</b>	

Product does not burn. The product will only burn after the water it contains is driven off. For dry polymer use carbon dioxide, foam, dry chemical or water fog to extinguish fire. Aqueous solution **is not flammable**.

### FIRE FIGHTING EQUIPMENT

Wear self-contained breathing apparatus (SCBA) and full fire-fighting protective clothing. Thoroughly decontaminate all protective equipment after use.

### FIRE FIGHTING INSTRUCTIONS

Containers of this material may build up pressure if exposed to heat (fire). Use water spray to cool fire-exposed containers.

### FIRE AND EXPLOSION HAZARDS

This material **will not burn** unless it is evaporated to dryness. Closed containers may rupture when exposed to extreme heat.

### HAZARDOUS COMBUSTION PRODUCTS

When dried polymer burns, water (H<sub>2</sub>O), carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO) and smoke are produced.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

### CONTAINMENT TECHNIQUES (Removal of ignition sources, diking etc)

Stop the leak, if possible. Ventilate the space involved.

### CLEAN-UP PROCEDURES

Wear suitable protective equipment. If recovery is not feasible, admix with dry soil, sand or non-reactive absorbent and place in an appropriate chemical waste container. Prevent spilled material from entering sanitary sewers, storm sewers, drainage systems and from entering bodies of water or ditches that lead to waterways. Transfer to containers by suction, preparatory for later disposal. Place in metal containers for recovery or disposal. Flush area with water spray. Wash contaminated property (e.g., automobiles) quickly before the material dries. For large spills, recover spilled material with a vacuum truck.

### OTHER EMERGENCY ADVICE

Spilled polymer emulsion is very slippery. Use care to avoid falls. A film will form on drying. Remove saturated clothing and wash contacted skin area with soap and water. Product imparts a milky white color to contaminated waters. Foaming may result. Sewage treatment plants may not be able to remove the white color imparted to the water.

## SECTION 7 - HANDLING AND STORAGE

### STORAGE

Keep from freezing. Store in a dry area. Keep containers closed when not in use to minimize contact with atmospheric air and prevent inoculation with microorganisms.

### HANDLING

Use only in well-ventilated areas. Avoid contact with eyes. Avoid breathing vapors. Avoid prolonged or repeated contact with skin. Wash hands thoroughly after handling and before eating or drinking.

## SECTION 8 - PERSONAL PROTECTION / EXPOSURE CONTROLS

### EXPOSURE GUIDELINES

There are no Occupational Safety and Health (OSHA) Permissible Exposure Limits (PEL) or American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV) or Short Term Exposure Limits (STEL) established for the component(s) of this product.

### EYE PROTECTION

Chemical safety glasses.

### HAND PROTECTION

Rubber Gloves. The breakthrough time of the selected glove(s) must be greater than the intended use period.

### RESPIRATORY PROTECTION

Not required under normal use.

### PROTECTIVE CLOTHING

No specific recommendation.

### ENGINEERING CONTROLS

Good general ventilation should be sufficient to control airborne levels of irritating vapors.



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Global Manufacturer & Distributor of  
**Soiltac® / Powdered Soiltac®**  
**Durasoil® AND Gorilla Snot®**

## SECTION 9 - TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

<b>PHYSICAL FORM</b>	liquid
<b>COLOR</b>	Milky White (transparent once cured)
<b>ODOR</b>	Mild / Slight (no odor once cured)
<b>pH</b>	4-9
<b>EVAPORATION RATE</b>	< 1 (BuAc=1)
<b>VAPOR DENSITY</b>	> 1 (Air = 1)
<b>BOILING POINT</b>	>100.00°C (>212.00°F)
<b>FREEZING POINT</b>	<0°C (<32°F)
<b>SOLUBILITY IN WATER</b>	Completely (100%) (until cured)
<b>SPECIFIC GRAVITY (Water = 1)</b>	1.02-1.10

## SECTION 10 - STABILITY AND REACTIVITY

### STABILITY

Stable at ambient temperatures. Coagulation may occur following freezing, thawing or boiling.

### INCOMPATIBILITY (Materials to Avoid)

No incompatibilities have been identified.

### HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition may form: Acetic acid and Acrolein. Thermal decomposition may produce various hydrocarbons and irritating, acrid vapors.

### HAZARDOUS POLYMERIZATION

Will not occur

### CONDITIONS TO AVOID

Freezing temperatures (until cured).

## SECTION 11 - TOXICOLOGICAL PROPERTIES

### ACUTE EYE TOXICITY

No Information is available.

### ACUTE ORAL TOXICITY

No Information is available.

### ACUTE SKIN TOXICITY

No Information is available.

### ACUTE INHALATION TOXICITY

No Information is available.

### CHRONIC/CARCINOGENICITY

This material **does not** contain 0.1% or more of any chemical listed by the International Agency for Research on Cancer (IARC), the National Toxicology Program (NTP), or regulated by the Occupational Safety and Health Administration (OSHA) as a carcinogen.

## SECTION 12 - ECOLOGICAL INFORMATION

### ECOTOXICITY

Common Name	Species	Test	Result	Concentration
Green Algae	Raphidocelus Subcapitata	96-hr chronic LC50	>1,000	Undiluted
Fathead Minnow	Pimephales Promelas	96-hr acute LC50	>1,208	Undiluted
Rainbow Trout	Oncorhynchus Mykiss	96-hr acute LC50	>1,000	Undiluted

### ENVIRONMENTAL FATE

No data is available.

## SECTION 13 - DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL METHOD

This material **is not** a RCRA hazardous waste. Disposal of this material is not regulated under RCRA. Consult federal, state and local regulations to ensure that this material and its containers, if discarded, is disposed of in compliance with all regulatory requirements. NOTE: As supplied or diluted, product material (foam included), when splashed on automobiles or other personal property, is difficult to remove if allowed to dry.

### RCRA HAZARD CLASS

This material **is not** a RCRA hazardous waste. When discarded in its purchased form, this material would not be regulated as a RCRA Hazardous waste under 40 CFR 261.



**SECTION 14 - TRANSPORT INFORMATION**

<b>DOT NON-BULK SHIPPING NAME</b>	Refer to Bill of Lading - Not DOT Regulated // Keep From Freezing // Not dangerous goods
<b>DOT BULK SHIPPING NAME</b>	Refer to Bill of Lading.
<b>IMO SHIPPING DATA</b>	Refer to Bill of Lading.
<b>ICAO/IATA SHIPPING DATA</b>	Refer to Bill of Lading - Not IATA Regulated // Keep From Freezing // Not dangerous goods
<b>CFR</b>	Not Regulated // Keep From Freezing // Not dangerous goods
<b>IMDG</b>	Not Regulated // Keep From Freezing // Not dangerous goods
<b>CTC</b>	Not Regulated // Keep From Freezing // Not dangerous goods

**SECTION 15 - REGULATORY INFORMATION**

**TSCA SECTION 8(b) INVENTORY STATUS**

All components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

**TSCA SECTION 12(b) EXPORT NOTIFICATION**

This material **does not** contain any components that are subject to the U.S. Toxic Substances Control Act (TSCA) Section 12 (b) Export Notification requirements.

**OSHA Hazard Communication Standard (29CFR1910.1200) hazard class(es)**

This material **is not** classified as hazardous under the criteria of the U.S. Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, 29 CFR 1910.1200

**EPA SARA Title III Section 304 CERCLA**

Reportable quantities have not been established for any of this material's components.

**EPA SARA Title III Section 311/312 HAZARD COMMUNICATION STANDARD (HCS)**

This material **is not** a hazardous chemical.

**EPA SARA Title III Section 313 TOXIC CHEMICAL LIST (TCL)**

This product **does not** contain Section 313 Reportable Ingredients.

**CANADIAN INVENTORY STATUS**

All components of this material are listed on the Canadian Domestic Substances List (DSL)

**CANADIAN WHMIS**

This material **is not** classified as a controlled product under the Canadian Workplace Hazardous Material Information System.

**ADDITIONAL CANADIAN REGULATORY INFORMATION**

This product **does not** contain a substance present on the WHMIS Ingredient Disclosure List (IDL) which is at or above the specified concentration limit.

**EUROPEAN INVENTORY STATUS (EINECS)**

The polymer portion of this product is manufactured from reactants which are listed on EINECS and meets the EINECS definition of an exempt polymer.

**AICS (Australia)**

Included on inventory

**ENCS (Japan)**

Included on inventory

**ECL (South Korea)**

Included on inventory

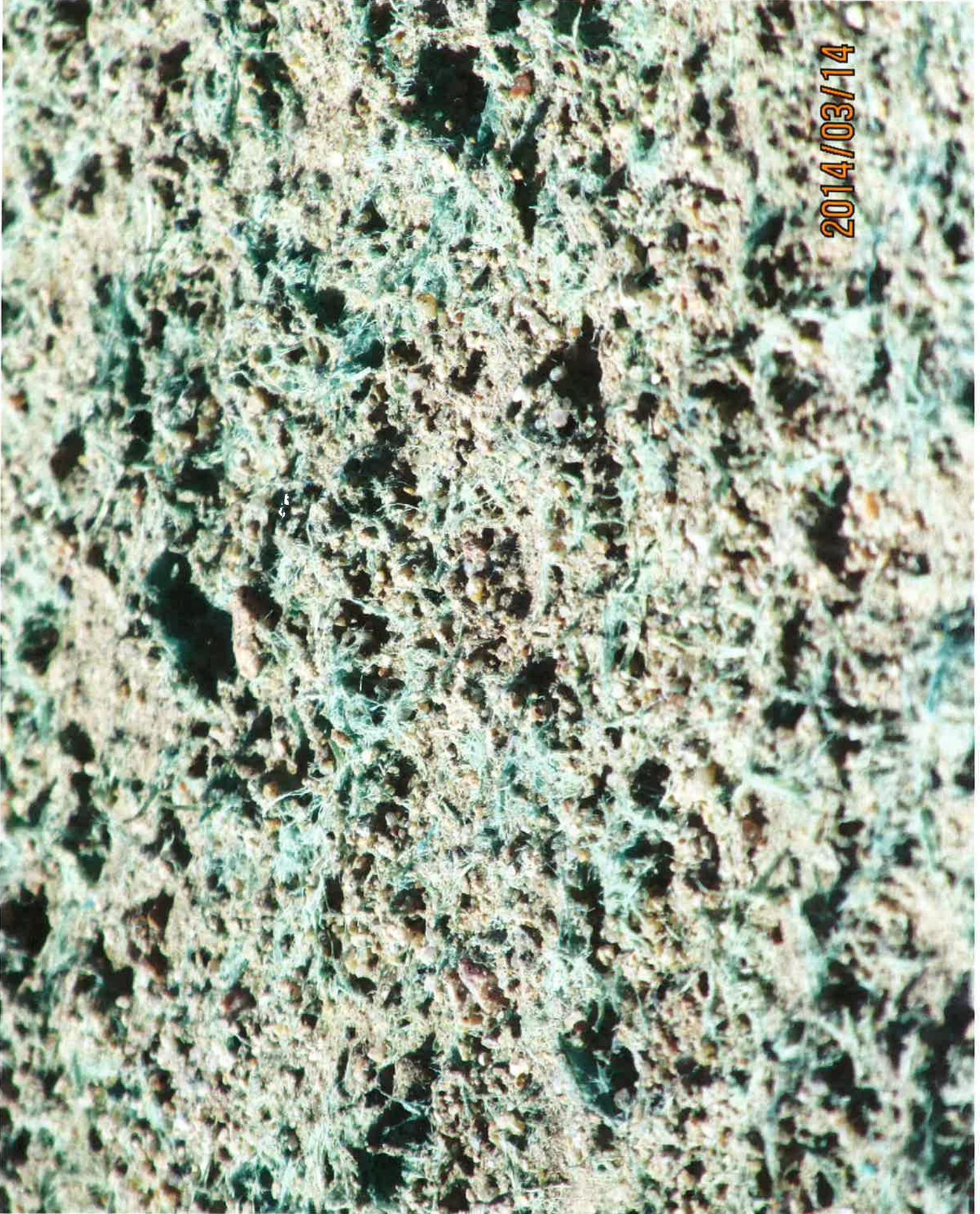
**SEPA (China)**

Included on inventory

**SECTION 16 – OTHER INFORMATION**

**HMIS and NFPA Classification**

Health	: 1
Flammability	: 0
Reactivity	: 0
Special Hazard	: 0



2014/03/14

