Emergency No: CHEMTREC 1-800-424-9300

DRAYNER, INC.
1221 Roosevelt Street
Kingsburg, CA. 93631

Material Safety Data Sheet

DRAYNER SEPTIC SEEP SYSTEM SOIL IMPROVER

This Material Safety Data Sheet contains environmental, health and toxicology information for your employees. Please make sure this information is given to them. It also contains information to help you meet community right-to-know/emergency response reporting requirements under SARA Title III and many other laws

The product label contains all information necessary and appropriate for authorized homeowner consumer uses, including an emergency medical information phone number for physicians. We provide you this MSDS to help you be responsible to worker "right to know" and to emergency response and reporting requirements under OSHA HAZCOM, SARA Title III, and many other laws.

Questions concerning human health, or suspected potential product overexposure, should be directed to the staff and toxicologists at Chevron Emergency Information Center by telephoning toll-free: 1-800-457-2022. Refer to the very similar products ORTHO DORMANT DISEASE CONTROL or ORTHO SEPTIC SEEP.

1. PRODUCT INFORMATION

DRAYNER SEPTIC SEEP SYSTEM SOIL IMPROVER

DANGER!

- CORROSIVE
- CAUSES IRREVERSIBLE EYE DAMAGE
- CAUSES SKIN IRRITATION
- HARMFUL IF ABSORBED THROUGH THE SKIN
- HARMFUL IF SWALLOWED
- MAY GIVE OFF HIGHLY TOXIC AND FLAMMABLE HYDROGEN SULFIDE (H2S) GAS IF MIXED WITH ACIDS
- KEEP OUT OF THE REACH OF CHILDREN

PRODUCT NUMBER: 1010-93 UPC 749021 01010
COMMON NAME: Liquid lime sulphur. Calcium Polysulfides

2.) FIRST AID - EMERGENCY NUMBER - CHEMTREC 1-800-424-9300

EYE CONTACT:
Flush eyes immediately with fresh water for at least 15 minutes while holding the eyelids open. Remove contact lenses if worn. See a doctor for further treatment as soon as possible.

SKIN CONTACT:
Remove contaminated clothing. Wash skin thoroughly with soap and water. See a doctor if any signs of symptoms described in this document occur. Discard contaminated non-waterproof shoes and boots. Wash contaminated clothing.

INHALATION:
If there are signs or symptoms as described in this document due to breathing hydrogen sulphide, move the person to fresh air. If breathing is stopped, apply artificial respiration. Call a doctor.

INGESTION:
If swallowed, give water to drink and telephone for medical advice. DO NOT make person vomit unless directed to do so by medical personnel. If medical advice cannot be obtained, then take the person and product container to the nearest medical emergency treatment center or hospital.

Note to Physician: In addition to the use of 100% oxygen and supportive care, suggested treatment for hydrogen sulphide poisoning includes the use of nitrites. This is based on similar mechanisms between hydrogen sulphide and hydrogen cyanide. The nitrite-induced methemoglobin is thought to bind the toxic hydrosulfide ion. Initial inhalation of amyl nitrite pearls for 15 to 30 seconds of each minute should be initiated until 10 ml of 3% solution of sodium nitrite can be administered intravenously at 2.5 to 5 ml per minute. While the efficacy of nitrites in hydrogen sulphide poisoning has not bee used for cyanide poisoning with some success and may be of benefit in hydrogen sulfide poison if other measures are ineffective.

3. IMMEDIATE HEALTH EFFECTS - (ALSO SEE SECTIONS 11 & 12)

EYE CONTACT: The eye irritation potential of this substance has not been determined. However, it may be a severe eye irritant and could cause permanent damage to your eyes and blindness. The degree of injury will depend on the amount of the material that gets into the eye and the speed and thoroughness of the first aid treatment. Signs and symptoms may include pain, tears, swelling, redness and blurred vision. This hazard evaluation is based on data from similar materials.

SKIN IRRITATION: The skin irritation potential of this substance has not been determined. However, it may be a severe skin irritant so contact with the skin could cause prolonged (weeks) injury to the affected area. The degree of injury will depend on the amount of material that gets on the skin and speed and thoroughness of the first aid treatment. Signs and symptoms may include pain or a feeling of heat, discoloration, swelling and blistering. This hazard evaluation is based on data from similar materials.

DERMAL TOXICITY:
The dermal toxicity of this substance has not been determined. However, it may be slightly toxic to internal organs if absorbed through the skin. The degree of injury will depend on the amount absorbed. This hazard evaluation is based on data from other similar materials.

RESPIRATORY/INHALATION:
If mixed with acids, highly toxic H2S gas will be released. This substance contains sulphur compounds which may form hydrogen sulphide. The rotten eggs odor of hydrogen sulphide is unreliable as an indicator of concentration. Signs and symptoms of overexposure to hydrogen sulphide include respiratory tract irritation, headaches, dizziness, nausea, gastrointestinal disturbances, coughing, a sensation of dryness and pain in the nose, throat and chest, confusion and unconsciousness. The U>S> Occupational Safety and Health Administration (OSHA) considers an atmosphere of 300ppm to be Immediately Dangerous to Life and Health (IDLH). This evaluation is based on data from similar materials.

INGESTION:
The oral toxicity of this substance has not been determined. However, it may be moderately toxic to internal organs if swallowed. The degree of injury will depend on the amount absorbed from the gut.
This material decomposes in the digestive tract to release hydrogen sulfide. Signs and symptoms of H2S toxicity may include headache, nausea, vomiting, drowsiness, amnesia, tremors, depressed respiration, convulsions, cyanosis and death due to respiratory paralysis. Severe irritation of the digestive tract may also occur. This hazard evaluation is based on data from similar materials.

4. PROTECTIVE EQUIPMENT

EYE PROTECTION:
Appropriate eye protection must be worn when working with this material or serious harm can result. Wear chemical goggles and a face shield at all times.

SKIN PROTECTION:
Do not get on skin or clothing. Wear protective clothing, including gloves, when handling.

RESPIRATORY PROTECTION:
This material may be an inhalation hazard, and unless ventilation is adequate, the use of approved respiratory protection is recommended. Note: If any of the applicable hydrogen sulfide standards are likely to be exceeded, positive supplied-air respiratory protection must be used. The ACGIH TWA of hydrogen sulfide is 10 ppm. OSHA STEL is 15 ppm.

VENTILATION:
Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure

5. FIRE PROTECTION

FLASH POINT: NDA
AUTOIGNITION: NDA
FLAMMABILITY LIMITS (% by volume in air): Lower: NDA Upper: NDA
EXTINGUISHING MEDIA: CO2, Dry chemical, Foam, Water fog.
NFPA RATINGS: Health 3; Flammability 1; Reactivity: 0; Special NDA
(Least -0 Slight-1, Moderate-2, High-3, Extreme-4). These values are obtained using the guidelines or published evaluations prepared by the National Fire Protection Association or, if applicable, by the National Paint and Coating Association and do not necessarily reflect the hazard evaluation of Drayner, Inc.. Read the entire document and label before using this product.
FIRE FIGHTING PROCEDURES:
Products of combustion from fires involving this material may be toxic. Avoid breathing smoke and mists. Avoid personnel and equipment contact with fallout and runoff. Minimize the amount of water used for fire fighting. Do not enter any enclosed area without full protective equipment., including self-contained breathing equipment. Contain and isolate runoff and debris for proper disposal. Decontaminate personal protective equipment and fire fighting equipment before reuse. Read the entire document.
COMBUSTION PRODUCTS:
Normal combustion forms carbon dioxide, water vapor and may produce oxides of sulfur. Incomplete combustion can produce carbon monoxide, oxyhydrocarbon derivations and sulfur derivations including hydrogen sulfide.

6. STORAGE, HANDLING AND REACTIVITY

HAZARDOUS DECOMPOSITION PRODUCTS:
Thermal decomposition can produce carbon monoxide, oxyhydrocarbon derivatives and sulfur derivatives including hydrogen sulfide.
STABILITY:
Stable
HAZARDOUS POLYMERIZATION:
Polymerization will not occur.
INCOMPATIBILITY:
Avoid contact with acids.
SPECIAL PRECAUTIONS:
READ AND OBSERVE ALL PRECAUTIONS ON PRODUCT LABEL.
KEEP OUT OF REACH OF CHILDREN
Keep DRAYNER SEPTIC SEEP in original container.
Do not store or transport near food or feed.

7.PHYSICAL PROPERTIES:

SOLUBILITY: Soluble in water.
APPEARANCE: Yellow liquid. Odor of rotten eggs.
BOILING POINT: 200 F (Approx.)
MELTING POINT: 10 F (Approx.)
EVAPORATION: NDA
SPECIFIC GRAVITY: 1.25
VAPOR PRESSURE: NDA

8. ENVIRONMENTAL CONCERNS, SPILL RESPONSE AND DISPOSAL

CHEMTREC EMERGENCY PHONE NUMBER: 1-800-424-9300 (24 hour)
SPILL/LEAK PRECAUTIONS:
Do not apply directly to water or wetlands. Do not contaminate by cleaning of equipment or disposal of waste. For help with any spill, leak fire or exposure involving this material, call day or night 1-800-457-2022.

Clean up spills immediately, observing precaution in Protective Equipment section. Cover spill with a generous amount of Oil Dry, cat litter, clay, rags or other absorbent. Use a stiff broom t mix thoroughly. Sweep up and place in disposal container. Scrub contaminated area with detergent and water using a stiff broom. Pick up liquid with additional absorbent and place in disposal container.
DISPOSAL METHODS:
Check governmental regulations and local authorities for approved disposal of this material.

9. EXPOSURE STANDARDS, REGULATORY LIMITS AND COMPOSITION

LABEL CONTENT:
This Material Safety Data Sheet (MSDS) contains health, safety and environmental information for you and your employees. It does not replace the precautionary use, storage and disposal information presented on the product label. This information will help you to prepare for emergency response and to meet community right-to-know/emergency response and reporting requirements under SARA Title III and many other laws.
Emergency response agencies and health care providers will also find the additional information useful.

Homeowner consumer use, storage and disposal for pesticides are regulated by the EPA through the approved label copy, and it is aa violation of Federal Law to use the product in any manner not prescribed on the EPA-approved label.

Special Note:

DRAYNER SEPTIC SEEP is not a pesticide regulated by the EPA. It is a soil amendment and ,therefore, not regulated by the EPA.

Although an MSDS is not required for a consumer product used by the homeowner, we provide this MSDS for employers who handle or store large quantities of this product (e.g. transporters, warehouses and retailers).

This MSDS should also be available to any employee whose exposure to the product in quantity, frequency or duration may be greater than that of the homeowner consumer.

This MSDS should be supplied to subsequent transporters, shippers, warehouses, retailers or employer where handling, storing of use of this product exceed in quantity, frequency or duration those of a homeowner consumer.

The percent compositions are given to allow for the various ranges of the components present in the whole product and may not equal 110%.

PERCENT/CAS# COMPONENT/REGULATORY LIMITS

100% DRAYNER SEPTIC SEEP

CONTAINING:

Active ingredients:
Calcium polysulfides 26%
Iso-octyphenoxypolyethoxyethanol.....10%
Inert Ingredients.....64%
Density Baum at 60 F 29

"Inert ingredients" is a term defined by the U.S. Environmental Protection Agency under the Federal Insecticide, Fungicide and Rodentside Act (40 CFR 158.153). It refers to any substance, other than and active ingredient, which is intentionally added t a pesticide product. Some inert ingredients may be hazardous chemicals, as defined by the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). The hazards associated with these inert ingredients have been included in this document.

TLV - Threshold Limit Value
STEL - Short-term Exposure Limit
RQ - Reportable Quantity
CC - Chevron Chemical Company
TWA - Time Weighted Average
TPQ - Threshold Planning Quantity
CAS - Chemical Abstract Service
N0.1344816 for Calcium Polysulfides

10. REGULATORY INFORMATION

DOT SHIPPING NAME: NDA
DOT HAZARD CLASS: NDA
DOT IDENTIFICATION NUMBER:

SARA 311 CATEGORIES:

1.	Immediate (Acute) Health Effects;	YES
2.	Delayed (Chronic) Health Effects;	NO
3.	Fire Hazard;	NO
4.	Sudden Release of Pressure Hazard;	NO
5.	Reactivity Hazard;	NO

None of the components of this material are found on the regulatory lists shown below.

REGULATORY LISTS SEARCHED:

01= SARA 313
02= MASS RTK
05= MI 406
08= IARC Group B
11= NJ RTK
04= CA Prop 65
07= IRAC Group 2A
10= PA RTK
03= NTP Carcinogen
06= IARC Group 1
09= SARA 302/304
12= CERCLA 302.4 13= MN RTK
16= ACGIH Calc. TLV 19= Chevron TLV
22= TSCA Sect 5 (a) (e) (f)
25= TSCA Sect 8 (a)
29= OSHA CEILING
14= ACGIH TLV
17= OSHA TWA
20= EPA Carcinogen
23= TSCA Sect 6
26= TSCA Sect 8 (d)
15= ACGIH STEL
18= OSHA STEL
21= TSCA Sect 4 (e)
24= TSCA Sect 12 (b)
28= Canadian WHMIS