

Safety Data Sheet

Issue Date: 20-Mar-2015

Revision Date: 10-Apr-2017

Version 1

1. IDENTIFICATION

Product Identifier

Product Name ClearDrip-O

Other means of identification

SDS # VLS-207
FFN 00020

UN/ID No UN2790

Recommended use of the chemical and restrictions on use

Recommended Use Soil Penetrant.

Details of the supplier of the safety data sheet

Supplier Address

Verdesian Life Sciences, U.S., LLC.
12222 Ave 352
Visalia, CA 93291

Emergency Telephone Number

Company Phone Number Business Phone: (800) 868-6446
Fax: (919) 535-3652
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance Clear light amber liquid

Physical state Liquid

Odor Strong acetic odor

Classification

| | |
|-----------------------------------|---------------------------|
| Skin corrosion/irritation | Category 1 Sub-category C |
| Serious eye damage/eye irritation | Category 1 |

Signal Word

Danger

Hazard statements

Causes severe skin burns and eye damage



Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a poison center or doctor/physician

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

Immediately call a poison center or doctor/physician

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

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing

Immediately call a poison center or doctor/physician

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

| Chemical Name | CAS No. | Weight-% |
|---------------|-------------|-------------|
| Acetic acid | 64-19-7 | Proprietary |
| Yucca | 223749-05-1 | Proprietary |

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures

| | |
|-----------------------|--|
| General Advice | Provide this SDS to medical personnel for treatment. |
| Eye Contact | Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician. |
| Skin Contact | Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. If skin irritation occurs: Get medical advice/attention. |
| Inhalation | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician. |
| Ingestion | Rinse mouth. Do NOT induce vomiting. Drink 1 or 2 glasses of water. Call a physician immediately. |

Most important symptoms and effects

| | |
|-----------------|---|
| Symptoms | Causes severe skin burns and eye damage. May be harmful in contact with skin. |
|-----------------|---|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|------------------------|
| Notes to Physician | Treat symptomatically. |
|---------------------------|------------------------|

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Water spray, dry chemical, carbon dioxide, foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Product is not flammable or combustible. Containers may explode when heated.

Hazardous Combustion Products May emit toxic or corrosive fumes under fire conditions.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Use water spray to keep fire-exposed containers cool. Move containers from fire area if you can do it without risk.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions Wear protective clothing as described in Section 8 of this safety data sheet. Ventilate affected area.

Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so. Soak up and contain spill with an inert (i.e. vermiculite, dry sand or earth) absorbent material.

Methods for Clean-Up Sweep up absorbed material and shovel into suitable containers for disposal. Discard any product, residue, disposable container or liner in full compliance with federal, state, and local regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing and eye/face protection. Avoid contact with skin, eyes or clothing. Do not eat, drink or smoke when handling this product. Use caution when combining with water; DO NOT add water to corrosive liquid, ALWAYS add corrosive liquid to water while stirring to prevent release of heat, steam and fumes.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up.

Incompatible Materials Strong oxidizing agents. Strong bases.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

| Chemical Name | ACGIH TLV | OSHA PEL | NIOSH IDLH |
|------------------------|-----------------------------|--|--|
| Acetic acid 64-19-7 | STEL: 15 ppm TWA: 10 ppm | TWA: 10 ppm TWA: 25 mg/m ³ (vacated) TWA: 10 ppm (vacated) TWA: 25 mg/m ³ | IDLH: 50 ppm TWA: 10 ppm TWA: 25 mg/m ³ STEL: 15 ppm STEL: 37 mg/m ³ |

Appropriate engineering controls

Engineering Controls

Apply technical measures to comply with the occupational exposure limits. Maintain eye wash fountain and quick-drench facilities in work area. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

Individual protection measures, such as personal protective equipment

Eye/Face Protection

Use chemical safety goggles / face shield.

Skin and Body Protection

Chemical resistant protective gloves.

Respiratory Protection

Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a MSHA/NIOSH-approved respirator.

General Hygiene Considerations

Avoid contact with skin, eyes and clothing. After handling this product, wash hands before eating, drinking, or smoking. If contact occurs, remove contaminated clothing. If needed, take first aid action shown on section 4 of this SDS. Launder contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

| | | | |
|------------------------------|--------------------------|-------------------------|--------------------|
| Physical state | Liquid | Odor | Strong acetic odor |
| Appearance | Clear light amber liquid | Odor Threshold | Not determined |
| Color | Clear light amber | | |
| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> | |
| pH | <1 | | |
| Melting Point/Freezing Point | Not determined | | |
| Boiling Point/Boiling Range | Not determined | | |
| Flash Point | 100 °C / 212 °F | | |
| Evaporation Rate | Not determined | | |
| Flammability (Solid, Gas) | n/a-liquid | | |
| Flammability Limits in Air | | | |
| Upper Flammability Limits | Not determined | | |
| Lower Flammability Limit | Not determined | | |
| Vapor Pressure | Not determined | | |
| Vapor Density | Not determined | | |
| Relative Density | 1.044 | (Water = 1) | |
| Water Solubility | 99.8% | | |
| Solubility in other solvents | Not determined | | |
| Partition Coefficient | Not determined | | |

| | |
|----------------------------------|----------------|
| Auto-ignition Temperature | Not determined |
| Decomposition Temperature | Not determined |
| Kinematic Viscosity | Not determined |
| Dynamic Viscosity | Not determined |
| Explosive Properties | Not determined |
| Oxidizing Properties | Not determined |

Other Information

Bulk Density 8.54 lbs/gal

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical Stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to Avoid

Incompatible Materials. Heat, flames and sparks.

Incompatible Materials

Strong oxidizing agents. Strong bases.

Hazardous Decomposition Products

Carbon oxides. Fumes. Smoke.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

| | |
|----------------------------|--|
| Product Information | To the best of our knowledge, the chemical, physical and toxicological properties of this material have not been thoroughly investigated |
| Eye Contact | Causes severe eye damage. |
| Skin Contact | Causes severe skin burns. |
| Inhalation | May cause irritation to the mucous membranes and upper respiratory tract. |
| Ingestion | Ingestion causes burns of the upper digestive and respiratory tracts. |

Component Information

| Chemical Name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------------|----------------------|-------------------------|-------------------------|
| Acetic acid 64-19-7 | = 3310 mg/kg (Rat) | = 1060 mg/kg (Rabbit) | = 11.4 mg/L (Rat) 4 h |

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or

potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

| | |
|-------------------------------|-----------------|
| ATEmix (oral) | 11,033.00 mg/kg |
| ATEmix (dermal) | 3,533.00 mg/kg |
| ATEmix (inhalation-dust/mist) | 38.00 mg/L |

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

| Chemical Name | Algae/aquatic plants | Fish | Crustacea |
|------------------------|----------------------|---|--|
| Acetic acid 64-19-7 | | 79: 96 h Pimephales promelas mg/L LC50 static 75: 96 h Lepomis macrochirus mg/L LC50 static | 47: 24 h Daphnia magna mg/L EC50 65: 48 h Daphnia magna mg/L EC50 Static |

Persistence/Degradability

Not determined.

Bioaccumulation

Not determined.

Mobility

| Chemical Name | Partition Coefficient |
|------------------------|-----------------------|
| Acetic acid 64-19-7 | -0.31 |

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

| Chemical Name | California Hazardous Waste Status |
|------------------------|-----------------------------------|
| Acetic acid 64-19-7 | Toxic Corrosive Ignitable |

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN2790
 Proper Shipping Name Acetic acid solution
 Hazard Class 8
 Packing Group III

IATA

UN/ID No UN2790
 Proper Shipping Name Acetic acid solution
 Hazard Class 8
 Packing Group III

IMDG

UN/ID No UN2790
 Proper Shipping Name Acetic acid solution
 Hazard Class 8
 Packing Group III

15. REGULATORY INFORMATION

International Inventories

| Chemical Name | TSCA | DSL/NDSL | EINECS/E LINCS | ENCS | IECSC | KECL | PICCS | AICS |
|---------------|------|----------|-------------------|---------|-------|---------|-------|------|
| Acetic acid | X | X | X | Present | X | Present | X | X |

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

| Chemical Name | Hazardous Substances RQs | CERCLA/SARA RQ | Reportable Quantity (RQ) |
|------------------------|--------------------------|----------------|--|
| Acetic acid 64-19-7 | 5000 lb | | RQ 5000 lb final RQ RQ 2270 kg final RQ |

SARA 313

Not determined

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

| Chemical Name | CWA - Reportable Quantities | CWA - Toxic Pollutants | CWA - Priority Pollutants | CWA - Hazardous Substances |
|---------------|-----------------------------|------------------------|---------------------------|----------------------------|
| Acetic acid | 5000 lb | | | X |

US State Regulations**U.S. State Right-to-Know Regulations**

| Chemical Name | New Jersey | Massachusetts | Pennsylvania |
|------------------------|------------|---------------|--------------|
| Acetic acid 64-19-7 | X | X | X |

| |
|------------------------------|
| 16. OTHER INFORMATION |
|------------------------------|

NFPA**Health Hazards****Flammability****Instability****Special Hazards**

Not determined

Not determined

Not determined

Not determined

HMIS**Health Hazards****Flammability****Physical hazards****Personal Protection**

Not determined

Not determined

Not determined

Not determined

Issue Date:

20-Mar-2015

Revision Date:

10-Apr-2017

Revision Note:

New product

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet