Material Safety Data Sheet:
VermisTerra
Charwise Wood Vinegar

SECTION 1: PRODUCT IDENTIFICATION AND COMPANY

Product Name: VermisTerra Charwise Wood Vinegar
Product Description: pyroligneous acid
Recommended use of the Material: Plant Growth Enhancer, Soil remediation and soil pH management.
Uses advised against: No information available.
STATEMENT OF HAZARDOUS NATURE: Not classified as hazardous according to criteria of the National Occupational Health and Safety Commission (NOHSC)
Not classed as a dangerous good under the Dangerous Goods Act.

Company: JL ORGANICS LLC
Address: 56955 Harrison St. Thermal, CA 92274
Telephone: 760-278-1331
Web Site: www.vermisterra.com
Emergency phone number: 911 in case of accidental ingestion

SECTION 2: HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)
INHALATION: Product may cause respiratory irritations, move to fresh air.
INGESTION: Product is hazardous for ingestion. DO NOT induce vomiting, wash mouth with copious amounts of water. Contact emergency personnel if ingested.
EYE CONTACT: Hold eye open and rinse slowly and gently with water for 15 minutes. Product may cause eye irritations material enters eyes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.
SKIN CONTACT: Allergic reactions may occur. Skin contact should be avoided.

SECTION 3: COMPOSITION

Product Description: Charwise is a mixture of primarily water with small percentage of pyroligneous acids and other volatile and non-volatile organic compounds.

Chemical identity CAS Number: 8030-97-5
Water > 85%
Acetic Acid
Other Compounds derived from gasification

SECTION 4: FIRST AID MEASURES

General advice
If inhaled, rinse mouth with water.
In case of skin contact, wash hands with warm soap and water.

Most important symptoms and effects, both acute and delayed: None
Protection of first-aiders: None

In case of skin contact: Take off and wash dirty clothing. Rinse skin with water/ or shower.
After eye contact: rinse out with plenty of water. Remove contact lenses.
After swallowing: make victim drink water (two glasses at most). Consult doctor if feeling unwell.
For personal protection see section 8. : No data available

If poisoning occurs, contact the Poisons Information Centre near you. Obtain first aid and medical attention if irritation of any type occurs.
Eye irritation must be treated by flushing eyes with running water for at least 15 minutes. Seek medical advice if inhaled swallowed.

SECTION 5: FIREFIGHTING MEASURES

Explosion Hazards: NA
Fire Hazards: Not classified as a dangerous good.
Flash point: No flash point observed.

Suitable Extinguishing Media: Fire extinguishers: -- Carbon dioxide, dry chemical, foam, water fog, powder.
Water may be used to extinguish all components of this media. Specific Hazards: Stand clear of smoke or dusts that are released from smoldering media.
Fire fighting advice: Contact Fire Department.
Operate fire extinguishers in accordance with manufacturers' instructions.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Occupational Release: Wear appropriate protective equipment and ensure area is adequately ventilated. Clean up methods depend on environment; absorption or dilution with plenty of water.

Low volume spillages may be applied at the recommended application rate to suitably vegetated land area away from drainage zones or watercourses.

Personal precautions, : protective equipment and emergency procedures
Environmental : precautions
Methods and materials : for containment and cleaning up
Advice for non-emergency personnel: Do not breathe vapours, aerosols.
Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.
No special precautionary measures necessary.
Observe possible material restrictions (see sections 7 and 10).
Sweep up, Dispose of properly. Clean up affected area.

SECTION 7: HANDLING AND STORAGE

Acidic in nature. Handle with care and avoid contact with eyes and skin. Use in well ventilated area and avoid contact with eyes and skin by wearing appropriate protective equipment. Handle in accordance with good industrial hygiene and safety practice. Limit all unnecessary personal contact.

Precautions for safe storage: Store in a tightly closed container, stored in a cool, dry, well ventilated area away from heat and incompatibles. Keep out of reach of children. Store material away from food stuff. Do not allow livestock access to this material.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure Standard - Acetic Acid 100% 10 ppm, 25 mg/m3
Engineering Controls: Adequate ventilation is required to keep concentration below exposure limits.
PPE - Safety glasses, gloves, clothing to cover skin and covered footwear are recommended when loading, mixing or applying this product.

Ingredients with workplace control parameters: Contains no substance with occupational exposure limit values
Biological Limit Values: No biological exposure standards set

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Dark Red to Brown liquid
Physical state: Liquid, Charwise is a water/organics mixture made from gasification process.
Odour: Smoke-bitter
Moisture content: >85%
Bulk Density: 1.02 g/cm
pH: 2 to 3
Solubility: Soluble in water
Boiling point: Approx 100 degrees C
Specific Gravity 1.0
Chemical Stability: Stable under normal environmental conditions
Conditions to avoid: None Known
Incompatible material: Chlorine; Acids; Ozone; Liquid oxygen.
Hazardous reactions: Avoid exposure to hot oxygen or flame

TOXICOLOGICAL INFORMATION
Toxicological Datat: No toxicological data is available

ECOLOGICAL INFORMATION
Eco-toxicity: This product may be toxic

Boiling point / boiling range No data available
Flash Point No data available
Evaporation rate No data available

Flammability (solid, gas) - NA Liquid
Upper flammability limit No data available
Lower flammability limit No data available
Vapor density No data available
Specific Gravity No data available
Water Solubility No data available
Solubility in other solvents No data available
VOC Content (%) Particle Size No data available
Conditions to avoid: None
Incompatible materials: None
Hazardous reactions: None
Respiratory Protection: If irritation is experienced, a face mask or respiratory protection should be worn.

SECTION 10: Stability and Reactivity

Reactivity: Is not reactive under recommended conditions for use and storage
Chemical stability: Chemically Stable under standard ambient conditions
Possibility of hazardous reactions: none under normal use
Conditions to avoid: none known
Incompatible materials: Strong alkalis
Hazardous decomposition products: in event of fire, see section 5

SECTION 11: Toxicological information

Toxicological Info: ACETIC ACID toxicity data
Oral LD50 (rat) 3300 mg/kg; Dermal LD50 (rabbit): 1100 mg/kg
Target organs: eyes, skin, respiratory system and gastrointestinal
Health Hazard: No adverse health effects expected if the product is handled in accordance with this SDS and product label. Contact to eyes and skin can cause irritation.

Carcinogenicity - Not classified under OHSC

Acute toxicity
LD50 Oral - Rat - > 90,000 mg/kg Remarks: (RTECS)
Inhalation: No data available Dermal: No data available
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
No data available
Respiratory or skin sensitization
No data available
Germ cell mutagenicity
No data available
Carcinogenicity
IARC:
NTP:
OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
Reproductive toxicity
No data available
Specific target organ toxicity - single exposure
No data availableSpecific target organ toxicity - repeated exposure
No data available
Aspiration hazard
No data available
11.2 Additional Information
RTECS: ZC0110000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
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SECTION 12: Ecological information

Environment: Safe to use as directed, always use diluted.
Ecotoxicity: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available

SECTION 13: Disposal considerations

This product may be disposed outdoors on the soil, plants, or grass.
Appropriate volumes may be applied onto suitably vegetated land area, away from drainage zones or watercourses.
Disposal methods - Waste from residues must be disposed of in accordance with the national and local
regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

SECTION 14: Transport Information - Always transport in sealed containers.

Not classified as a dangerous good according to the Transportation of Dangerous Goods Act
DOT No restricted
TDG Not restricted for road or rail
ICAO Not restricted
IATA Not restricted
IMDG/IMO Not restricted

International Regulations IATA-DGR
Not regulated as a dangerous good
IMDG-Code
Not regulated as a dangerous good
Transport in bulk according to IMO instruments
Not applicable for product as supplied.
National Regulations 49 CFR Road
Not regulated as a dangerous good
Poison Inhalation Hazard : No

SECTION 15: Regulatory information

OHSC Status - No specific requirement according to the Occupational Health and Safety Commission (OHSC)
California Proposition 65 - Does not contains any Proposition 65 chemicals.
CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.
SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.
SARA 302 Extremely Hazardous Substances Threshold Planning Quantity
This material does not contain any components with a section 302 EHS TPQ.
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489).
Clean Water Act
This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307
This product does not contain any priority pollutants related to the U.S. Clean Water Act
US State Regulations Massachusetts Right To Know
No components are subject to the Massachusetts Right to Know Act.
Pennsylvania Right To Know
water
Maine Chemicals of High Concern
Product does not contain any listed chemicals
Vermont Chemicals of High Concern
Product does not contain any listed chemicals
Washington Chemicals of High ConcernProduct does not contain any listed chemicals
New Jersey Right To Know
water
7732-18-5
The components of this product are reported in the following inventories:
TSCA : All substances listed as active on the TSCA inventory
TSCA list
No substances are subject to a Significant New Use Rule.
No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16: Other information:

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Revision Date: August 26, 2025

OTHER INFORMATION This MSDS is an overview at the date of issue about the chemical, physical and biological properties of this product, safety hazards of the material and general guidance on how to safely handle the material in the occupational and natural environment. As JL Organics cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, attain application instructions from JL Organics or seek professional agronomic advice, acknowledge the duty of care that is required when attaining fertilizer products or complete nationally accredited training on how to best prevent, manage and control the potential risks arising from the use of this material before purchasing this product. When further technical information is required about the information in this Material Safety Data Sheet, please contact JL Organics.

Disclaimer This information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. JL Organics makes no warranty of any kind, expressed or implied, concerning the safe use of this material in your process or combination with any other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. This material may be released from gas, liquid or solid materials made directly or indirectly from it. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.