

MATERIAL SAFETY DATA SHEET: PERSIST™ PAF

1. PRODUCT AND COMPANY INFORMATION

Product Name: Persist™ PAF

Other Product Names: Persist™ Pyrolygneous Acid Formula, V-GRID PISTACHIO

VINEGAR, V-Grid Wood VINEGAR Recommended use of the Material: Plant

Growth Enhancer Supplier's details:

Company: V-Grid Energy Systems Inc.

Contact Person: Rich Chatfield

Address: 513 Calle San Pablo

Camarillo, California 93012

Telephone Number: (805) 482-9040

Internet Web Site: www.vgridenergy.com / www.PersistNCP.com

Emergency phone number: 911 in case of accidental ingestion

2. HAZARDS IDENTIFICATION

INHALATION: Product may cause respiratory irritations

INGESTION: Product is hazardous for ingestion. Contact emergency personnel if ingested.

EYE CONTACT: Product may cause eye irritations if personnel are near material.

SKIN CONTACT: Allergic reactions may occur. Skin contact should be avoided.

3. COMPOSITION

Product Description: Persist™ PAF is a mixture of primarily water with small percentage of pyrolygneous acids and other volatile and non-volatile organic compounds. Chemical Identity
CAS

Water > 85%

Acetic Acid

Other Compounds derived from gasification

- 4. FIRST AID MEASURES** 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. Skin irritation must be treated by washing contaminated area with soap and water. Seek medical advice if inhaled or swallowed.
- 5. FIRE FIGHTING MEASURES** This product may be flammable if allowed to dry. Some organic matter particles may smoulder and emit smoke. 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 smouldering media. Fire fighting advice: Contact Fire Department. Operate fire extinguishers in accordance with manufacturers' instructions. Hazchem Code: Hazardous

6. **ACCIDENTAL RELEASE MEASURES** Low volume spillages may be applied at the recommended application rate to a suitably vegetated land area away from drainage zones or watercourses.
7. **HANDLING AND STORAGE** Precautions for Safe Storage: Store in a sealed container. Store material away from foodstuff. Do not allow livestock access to this material.
8. **EXPOSURE CONTROLS / PERSONAL PROTECTION**
Biological Limit Values: No biological exposure standards set
Engineering Controls: Avoid confined and non-ventilated spaces. Adequate ventilation required
Personal Protective Equipment: Overalls, gloves and covered footwear are recommended when loading, mixing or applying this product.
9. **PHYSICAL AND CHEMICAL PROPERTIES Appearance:**
Persist™ PAF is a water/organics mixture made from a gasification process. Moisture Content: >85%
Bulk Density: 1.02 g/cm³
pH: 2 to 3
Chemical Stability: Stable under normal environmental conditions
Conditions to avoid: None Known.
Incompatible materials: Chlorine; Acids; Ozone; Liquid oxygen
Hazardous decomposition products: Chlorine; Acids; Ozone; Liquid oxygen.
Hazardous reactions: Avoid exposure to hot oxygen or flame.
TOXICOLOGICAL INFORMATION Toxicological Data: No toxicological data is available.
ECOLOGICAL INFORMATION Eco-toxicity: This product may be toxic.
10. **DISPOSAL CONSIDERATIONS** This product may be disposed at an authorized waste management facility. Appropriate volumes may be applied onto a suitably vegetated land area away from drainage zones or watercourses.
11. **TRANSPORT INFORMATION** Always transport in sealed containers.
12. **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 V-Grid Energy Systems cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, attain application instructions from V-Grid Energy

Systems 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 V-Grid Energy Systems.

13. **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. V-Grid Energy Systems 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.