

California Organic Fertilizers, Inc.™

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MATERIAL SAFETY DATA SHEET Phyta-Ger QC™ (Adjuvant Label)

SECTION I. IDENTIFICATION

Chemical Family: N/A

Chemical Name and Synonyms: Vinegar Acetic Acid; Acetic Acid solution

Formula: Proprietary

Trade Name and Synonyms: Phyta-Ger-QC™

SECTION II. PRODUCT AND COMPONENT HAZARD DATA

A.	Components:	CAS. Reg. No:	TLV:
	Vinegar	64-19-7	N/A
	Water	7732-18-5	N/A

SECTION III. PHYSICAL DATA

- Appearance and Odor: Colorless liquid with strong vinegar like odor.
- Specific Gravity: 1.01 to 1.04 (Water = 1)
- Percent Volatile by Volume: 100
- Evaporation Rate (Ethyl Ether = 1): < 1
- Boiling Point: 215°F @ 760 mm Hg & 100 grain
- Vapor Pressure: 11 mm Hg @ 68°F
- Vapor Density (Air = 1): 2.1 (Air = 1)
- Solubility in Water: Miscible

SECTION IV. FIRE AND EXPLOSION HAZARD DATA

- Flash Point: N/A
- Flammable Limits: lel: 4.0; uel: 20.0
Flammable Liquid and Vapor.
- Unusual Fire and Explosion Hazards: Toxic gases and vapors may be released in a fire involving concentrated vinegar
- Extinguishing Agent: Water, CO₂, Foam or dry chemicals.
- Special Fire-Fighting Procedures: Wear self-contained apparatus.

SECTION V. REACTIVITY DATA

- Stability: Stable under ordinary conditions of use and Storage.
- Hazardous Polymerization: Will not occur.
- Incompatibility: Strongly reactive to strong caustics.
- Hazardous Decomposition Products: CO and CO₂ may be produced when heated to decomposition.

SECTION VI. TOXICITY AND HEALTH

A. EXPOSURE LIMITS

- OSHA Permissible Exposure Limit (PEL): N/A
- Threshold Limit Value (TLV): N/A

B. EFFECTS OF OVEREXPOSURE

1. ACUTE

- Inhalation: Inhalation of concentrated vapors may cause damage to the lining of the nose, throat, and lungs.
- Eyes: Eye contact with concentrated solutions may cause severe eye damage..
- Ingestion: Swallowing a concentrated solution can cause severe injury..
- Skin: May be irritating after prolonged exposure.

2. CHRONIC Not known.

C. EMERGENCY FIRST AID PROCEDURES

- Inhalation: Remove from exposure area. If irritation exists from mists, or in the event of massive inhalation, seek medical attention.
- Eyes: Rinse thoroughly with running water for 15 minutes. Seek medical attention.
- Ingestion: If conscious, drink at least 2 glasses of milk or water. Do not induce vomiting. Consult a physician.
- Skin: Wash with soap and water. Rinse thoroughly. Seek medical attention if inflammation occurs.

D. ANIMAL TOXICITY DATA

N/A

SECTION VII. PERSONAL PROTECTION AND CONTROLS

A. RESPIRATORY PROTECTION

- As required by conditions. Use an OSHA or NIOSH approved respirator if required.

B. VENTILATION

- General: Usually adequate.
- Local Exhaust: Should be used for safe, comfortable working conditions.

SECTION VII. PERSONAL PROTECTION AND CONTROLS (continued)**C. SKIN AND EYE PROTECTION**

- Safety glasses should be worn in any type of industrial operation. Protective gloves should be worn as good hygiene dictates.

D. OTHER CONTROL MEASURES

- An eye bath and washing facilities should be available. Wash thoroughly after handling. Do not smoke when handling chemicals.

SECTION VIII. SPECIAL STORAGE AND HANDLING PRECAUTIONS

Since emptied packages retain product residue follow label warning even after package is emptied. Dried residue can constitute a fire hazard. Keep equipment and workplace clean.

SECTION IX. SPILL, LEAK, AND DISPOSAL PRACTICES

- Steps to be Taken in Case Material is Released or Spilled: Collect and contain for salvage or disposal. Absorb waste on inert media and dispose of as solid waste.
- Waste Disposal Method: Landfill in compliance with all federal, state and local laws concerning health and environment.

SECTION X. ENVIRONMENTAL EFFECTS DATA**SUMMARY:**

This material is expected to be slightly toxic to aquatic life. The LC50/96-hour values for fish are between 10 and 100 mg/l.

SECTION XI. TRANSPORTATION

- DOT Hazard Classification: N/A, UN number 40-100 grain: UN2789, 101-300 grain; UN2790

SECTION XII. REFERENCES

1. The Merck Index: An Encyclopedia of Chemicals and Drugs, 1983 10th ed., Merck and Company, Rahway, N.J.
2. Dangerous Properties of Industrial Materials, 5th ed., 1979, Sax, N.I., Van Nostrand Reinhold & Co., N.Y., N.Y.
3. 29 C F R 1910 General Industry OSHA Safety and Health Standards, U.S. Department of Labor, Occupational Safety and Health Administration. Rev. 1983, 1985.
4. Threshold Limit Values for Chemical Substances and Physical Agents in the Workroom Environment with Intended Changes. American Conference of Governmental Industrial Hygienists, Cincinnati, OH. 1985.
5. Handbook of Chemistry and Physics, Chemical Rubber Co., Cleveland, OH.
6. Water Quality Criteria, J.E. McKee and H.W. Wolf, Editors., Pub. No. 3-A (Revised). State of California, 1963.
7. Registry of Toxic Effects of Chemical substances: 1983 Supplement to the 1981-1982 Edition. National Institute of Occupational Safety and Health, 1984.

IMPORTANT

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