VOLUNTARY PURCHASING GROUPS, INC.

Safety Data Sheet
Ferti-lome Orchid Plant Food 9-7-9

SECTION 1: Identification

GHS Product identifier

Product name	Ferti-lome Orchid Plant Food 9-7-9
Product number	18021
Brand	Ferti-lome

Other means of identification
NPK 9-7-9

Recommended use of the chemical and restrictions on use
Fertilizer

Supplier's details

Name	Voluntary Purchasing Groups, Inc.
Address	230 FM 87 Bonham TX 75418 USA
Telephone	855-270-4776

Emergency phone number

In the event or a medical or chemical emergency contact ChemTel, Inc.
North American 1-800-255-3924 or worldwide Intl. + 01-813-248-0585

SECTION 2: Hazard identification

General hazard statement
Not a hazardous substance or mixture.

Classification of the substance or mixture

GHS classification in accordance with: OSHA (29 CFR 1910.1200, 2012)

GHS label elements, including precautionary statements

Precautionary statement(s)

P102	Keep out of reach of children.
P103	Read label before use.

Other hazards which do not result in classification
Not a hazardous substance or mixture.

Statement regarding ingredients of unknown toxicity
Not a hazardous substance or mixture.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

Component	Concentration
Potassium chloride (CAS no.: 7447-40-7; EC no.: 231-211-8)	**10 - 20 %**
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
Polyphosphoric acids, ammonium salts (CAS no.: 68333-79-9)	**15 - 30 %**
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
Urea (CAS no.: 57-13-6)	**15 %**
CLASSIFICATIONS: No data available. HAZARDS: No data available.	

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice
Call a poison control center or doctor for treatment advice. Have the Safety Data Sheet, and if available, the product container or label with you when calling a poison control center or doctor, or going for treatment. Never give fluids or induce vomiting if a patient is unconscious or convulsing regardless of cause of injury. If breathing difficulties occur, seek medical attention immediately.

If inhaled
Move person to fresh air. If person is not breathing, give artificial respiration, preferably mouth-to-mouth.
If breathing is difficult, give oxygen. Call a poison control center or doctor for treatment advice

In case of skin contact
Wash skin with soap and plenty of water for 15 to 20 minutes.
Call a poison control center or doctor for treatment advice.

In case of eye contact
Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes.
Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eyes.
Call a poison control center or doctor for treatment advice.

If swallowed
Do not induce vomiting.
Never give anything by mouth to an unconscious person.
Call a poison control center or doctor for treatment advice.

Personal protective equipment for first-aid responders
Respiratory Protection: NIOSH/MSHA approved for protection against toxic dusts containing quartz.
Ventilation: General or local exhaust to maintain employee exposure below the TLV/PEL.
Protective Gloves: PVC or Neoprene.
Eye Protection: Safety glasses or goggles (ANSI Z87.1 1979)
Other Protective Clothing or Equipment: Apron, boots, long sleeved shirt and full-length pants may be worn when
necessary to prevent skin contact.
Eye wash and shower facilities should be available.

Most important symptoms/effects, acute and delayed

Direct contact with eyes may cause temporary irritation.

Indication of immediate medical attention and special treatment needed, if necessary
Apply a symptomatic and supportive treatment.

SECTION 5: Fire-fighting measures

Suitable extinguishing media
Water. Foam. Dry powder. Sand.

Specific hazards arising from the chemical

POTASSIUM CHLORIDE: Hydrogen chloride gas, Potassium oxides

Special protective actions for fire-fighters
Firefighters must wear self contained breathing apparatus with full face mask.

Further information
Prevent run-off from fire control or dilution from entering streams, sewers or drinking water supply.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures
Evacuate unnecessary personnel. Ensure adequate ventilation. Use personal protective equipment.

Methods and materials for containment and cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel). Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storage

Precautions for safe handling
Ensure adequate ventilation. Wash hands before breaks and immediately after handling the product. Avoid contact with
skin, eyes and clothing. Avoid ingestion and inhalation.

Conditions for safe storage, including any incompatibilities
Keep container tightly closed in a dry and well-ventilated place.

Specific end use(s)
Residential fertilizer

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls
Provide sufficient mechanical ventilation (general and/or local exhaust) to keep the airborne concentrations of vapours, mists, aerosols or dust below their respective occupational exposure limits.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection
Chemical goggles or safety glasses.

Skin protection

Wear protective gloves.

Respiratory protection
Respiratory protection is not required for normal use. Where the conditions in the workplace require a respirator, it is necessary to follow a respiratory protection program. Moreover, respiratory protection equipment (RPE) must be selected, fitted, maintained and inspected in accordance with regulations and standard 29 CFR 1910.134 (OSHA), ANSI Z88.2 or CSA Z 94.11 (Canada) and approved by NIOSH/MSHA.

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.)	Light green liquid
Odor	Mild
Odor threshold	No data available.
pH	6.5
Melting point/freezing point	No data available.
Initial boiling point and boiling range	No data available.
Flash point	No data available.
Evaporation rate	No data available.
Flammability (solid, gas)	No data available.
Upper/lower flammability or explosive limits	No data available.
Vapor pressure	No data available.
Vapor density	No data available.
Relative density	1.233
Solubility(ies)	No data available.
Partition coefficient: n-octanol/water	No data available.
Auto-ignition temperature	No data available.
Decomposition temperature	No data available.
Viscosity	No data available.

Additional properties

Physical state	Liquid
Color	Light green

SECTION 10: Stability and reactivity

Reactivity
No reactivity expected.

Chemical stability
Stable under normal conditions of use.

Possibility of hazardous reactions
A dangerous reaction will not occur.

Conditions to avoid
Avoid contact with incompatible materials.

Incompatible materials

POTASSIUM CHLORIDE: Strong acids, Strong oxidizing agents

Hazardous decomposition products

POTASSIUM CHLORIDE: Other decomposition products - No data available
In the event of fire: see section 5

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity
Potassium chloride

Result: IARC: 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.
ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP: 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.
OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
LC50 - Pimephales promelas (fathead minnow) - 880 mg/l - 96 h
NOEC - Pimephales promelas (fathead minnow) - 500 mg/l - 7 d
LOEC - Pimephales promelas (fathead minnow) - 1,000 mg/l - 7 d
EC50 - Daphnia magna (water flea) - >440 mg/l - 48 h

Skin corrosion/irritation
Prolonged and repeated contact may cause redness and slight irritation of the skin.

Serious eye damage/irritation
Direct contact with eyes may cause temporary irritation

Respiratory or skin sensitization
Exposure to high concentrations of vapour may cause coughing, sneezing, nose, throat and respiratory tract irritation.

Germ cell mutagenicity
Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause mutagenic effects.

Carcinogenicity
Ingredients present at levels greater than or equal to 0.1% of this product are not listed as a carcinogen by IARC, ACGIH, NIOSH, NTP or OSHA.

Reproductive toxicity
Ingredients in this product present at levels greater than or equal to 0.1% are not known to cause reproduction effects.

Specific target organ toxicity (STOT) - single exposure
No target organ is listed.

Specific target organ toxicity (STOT) - repeated exposure
No target organ is listed.

Aspiration hazard
No information available.

Additional information
The oral and skin acute toxicity estimates (ATE) of the mixture were calculated to be greater than 2000

mg/kg. The acute toxicity estimate (ATE) by inhalation (dust/mist) of the mixture was calculated to be greater than 5 mg/L/4h.

SECTION 12: Ecological information

Toxicity
Potassium chloride
LC50 - Pimephales promelas (fathead minnow) - 880 mg/l - 96 h
NOEC - Pimephales promelas (fathead minnow) - 500 mg/l - 7 d
LOEC - Pimephales promelas (fathead minnow) - 1,000 mg/l - 7 d
EC50 - Daphnia magna (water flea) - >440 mg/l - 48 h

Persistence and degradability
Inorganic compounds persist in the environment indefinitely or incorporate into biological systems. The term biodegradability, as such, is not applicable to inorganic compounds. The product is a mixture whose ingredients are readily biodegradable (> 60% in 28 days).

Bioaccumulative potential
The inorganic products of this kind are not expected to accumulate in living organisms, but they are expected to accumulate in plants.

Mobility in soil
Urea is soluble in water, it is not expected to partition to the soil. Under alkaline soil conditions, soluble phosphates are translocated in the soil only over very short periods and are then immobilized under calcium or magnesium salts. Under acidic soil conditions, sparsely soluble phosphates tend to solubilize and may migrate to water.

Other adverse effects
Product will promote algae growth which may degrade water quality and taste. Will release ammonium ions. As pH increases, more alkaline soil, the fraction of the ammonia gas increases. Ammonia is a toxic hazard to fish. This chemical does not deplete the ozone layer.

SECTION 13: Disposal considerations

Disposal methods

Product disposal
Important! Prevent waste generation. Use in full. DO NOT dispose residue in sewers, streams or drinking water supply. Empty containers can be treated (recycled) where there is a recovery program. Observe all federal, state/provincial and municipal regulations. If necessary consult the Department of Environment or the relevant authorities.

SECTION 14: Transport information

DOT (US)
Not dangerous goods

IMDG
Not dangerous goods

IATA
Not dangerous goods

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

SARA 311/312 Hazards
No SARA Hazards for: POTASSIUM CHLORIDE.

SARA 313 Components
This material [POTASSIUM CHLORIDE] does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 302 Components
No chemicals in this material [POTASSIUM CHLORIDE] are subject to the reporting requirements of SARA Title III, Section 302.

US EPA TSCA public inventory
Chemical name: Potassium chloride (kcl)
CAS number: 7447-40-7

Water hazard class (WGK, Germany)
Chemical name: Potassium chloride, cas number: 7447-40-7
WGK hazard class: WGK 1 - Slightly hazardous to water

US EPA TSCA public inventory
Chemical name: Polyphosphoric acids, ammonium salts
CAS number: 68333-79-9

Water hazard class (WGK, Germany)
Chemical name: Polyphosphoric acids, ammonium salts, cas number: 68333-79-9
WGK hazard class: WGK 1 - Slightly hazardous to water

US EPA TSCA public inventory
Chemical name: Urea
CAS number: 57-13-6

Water hazard class (WGK, Germany)
Chemical name: Urea, cas number: 57-13-6
WGK hazard class: WGK 1 - Slightly hazardous to water

California Proposition 65 List
Product name: Ferti-lome Orchid Plant Food 9-7-9

Massachusetts Right To Know Components
Product name: Ferti-lome Orchid Plant Food 9-7-9

New Jersey Right To Know Components
Product name: Ferti-lome Orchid Plant Food 9-7-9

Pennsylvania Right To Know Components
Product name: Ferti-lome Orchid Plant Food 9-7-9

SECTION 16: Other information

Further information/disclaimer
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