



VOLUNTARY PURCHASING GROUPS, INC.

Safety Data Sheet Ferti-lome® 2-N-1 Systemic

SECTION 1: Identification

GHS Product identifier

Product name	Ferti-lome® 2-N-1 Systemic
Product number	10478; 10478Q
Brand	Ferti-lome®

Other means of identification

EPA Reg. No. 69361-19-7401

Recommended use of the chemical and restrictions on use

Insecticide/Fungicide

Supplier's details

Name	Voluntary Purchasing Groups, Inc.
Address	230 FM 87 Bonham TX 75418 USA

Telephone	855-270-4776
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Emergency phone number

In the event of 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

Classification of the substance or mixture

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

GHS label elements, including precautionary statements

Pictograms



Signal word

Warning

Hazard statement(s)

H302

Harmful if swallowed

Precautionary statement(s)

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P102	Keep out of reach of children.
P103	Read label before use.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P301+P312	IF SWALLOWED: Call a POISON CENTER /doctor if you feel unwell.
P330	Rinse mouth.
P501	Dispose of contents/container to in accordance with Federal, State and local regulations.

SECTION 3: Composition/information on ingredients

Mixtures

Hazardous components

Component	Concentration
Imidacloprid (CAS no.: 138261-41-3)	0.138 - 0.168 %
CLASSIFICATIONS: No data available. HAZARDS: No data available.	
Tebuconazole (iso) (CAS no.: 107534-96-3; EC no.: 403-640-2; Index no.: 603-197-00-7)	0.743 - 0.908 %
CLASSIFICATIONS: Toxic to reproduction, Cat. 2; Acute toxicity, Cat. 4; Hazardous to the aquatic environment, long-term (chronic), Cat. 2. HAZARDS: H302 - Harmful if swallowed; H361d - ; H411 - Toxic to aquatic life with long lasting effects.	

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice	Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
If inhaled	Assure fresh air breathing. Allow the person to rest.
In case of skin contact	Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.
In case of eye contact	Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.
If swallowed	Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

Most important symptoms/effects, acute and delayed

May cause cancer.

Indication of immediate medical attention and special treatment needed, if necessary

No information available.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Dry chemical, Foam

Specific hazards arising from the chemical

Flash point > 93.3°C/>199.9 °F Method: Setaflash Closed Cup

Special protective actions for fire-fighters

Keep out of smoke. Contain runoff.

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SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use proper protective equipment to minimize personal exposure (see Section 8). Absorb with vermiculite or other inert absorbent. Collect and contain contaminated absorbent and dike material for disposal.

Environmental precautions

Do not allow material to enter streams, sewers, or other waterways or contact vegetation.

Methods and materials for containment and cleaning up

Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Reference to other sections

Section 8

SECTION 7: Handling and storage

Precautions for safe handling

Read label carefully before use. Use the recommended equipment when handling this product (see Section 8). Avoid contact with skin, eyes and clothing. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, or using the toilet.

Conditions for safe storage, including any incompatibilities

Store in original container in a secured, dry storage area. Store in cool place. Store in an area that is out of reach of children and animals, away from the home or garden. Keep from freezing.

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls

Follow all label instructions.

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

Eye/face protection

Eye contact should be prevented through use of chemical safety glasses with side shields or splash proof goggles.

Skin protection

Chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride. Wear long-sleeved shirt and long pants and shoes plus socks.

Body protection

Chemical resistant gloves made of any waterproof material such as polyethylene or polyvinyl chloride. Wear long-sleeved shirt and long pants and shoes plus socks.

Respiratory protection

Follow all label instructions.

SECTION 9: Physical and chemical properties

Appearance (physical state, color, etc.)

Odor

Odor threshold

Liquid

Slight insecticide type odor

None known

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pH	7-8
Melting point/freezing point	No information available.
Initial boiling point and boiling range	No information available.
Flash point	No information available.
Evaporation rate	No information available.
Flammability (solid, gas)	No information available.
Upper/lower flammability or explosive limits	No information available.
Vapor pressure	No information available.
Vapor density	No information available.
Relative density	1.36 – 1.38 g/cm ³ at 200 C
Solubility(ies)	No information available.
Partition coefficient: n-octanol/water	No information available.
Auto-ignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity	No information available.

Additional properties

Physical state	Liquid
Color	Unkonwn
Explosive properties	No thermal or impact explosive material

SECTION 10: Stability and reactivity

Reactivity

No additional information available.

Chemical stability

Stable under normal conditions.

Possibility of hazardous reactions

Hazardous Polymerization (Conditions to Avoid): Will not occur.

Conditions to avoid

Do not freeze. Keep in a dry place.

Incompatible materials

Strong acids and bases.

Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

ATE (oral) 500.000 mg/kg body weight

LD50 - oral - rat - 1700 mg/kg

LD50 - dermal - rat - >5000 mg/kg

LC50 - inhalation - rat - >0.8 mg/l/4h

Skin corrosion/irritation

Rabbit: Mild irritant with all irritation clearing within 72 hours post-treatment.

Serious eye damage/irritation

Rabbit: Moderate irritation to the iris and/or conjunctiva with all irritation clearing within 48 hours posttreatment.

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Respiratory or skin sensitization

Guinea pig: Not a dermal sensitizer.

Germ cell mutagenicity

Numerous in vitro and in vivo mutagenicity studies have been conducted on tebuconazole of which were negative.

The imidacloprid mutagenicity studies, taken collectively, demonstrate that the active ingredient is not genotoxic or mutagenic.

Carcinogenicity

Tebuconazole gave no evidence of a carcinogenic potential in an oncogenicity study in rats, however, in a study using mice there was an increased incidence of hepatocellular neoplasms at a dose level approximately three-fold greater than the maximum tolerated dose (MTD). In oncogenicity studies in rats and mice, imidacloprid was not carcinogenic in either species.

Reproductive toxicity

In a two generation study in rats treated with tebuconazole, smaller litters and decreased pup body weights were observed in conjunction with maternal toxicity at the highest concentration tested (1000 ppm).

In a two generation reproduction study in rats, imidacloprid was not a primary reproductive toxicant. Offspring exhibited reduced body weights at the high dose and in conjunction with maternal toxicity.

Tebuconazole produced teratogenic effects in conjunction with maternal toxicity in mice and rabbits via oral and/or dermal exposure. When tested in the rat, developmental effects were observed in conjunction with maternal toxicity via oral exposure. Teratogenic effects were not observed in the rat following either route of exposure.

In developmental toxicity studies in rats and rabbits, there was no evidence of an embryotoxic or teratogenic potential for imidacloprid. In both species, slight developmental effects were observed only at high doses and in conjunction with maternal toxicity.

Summary of evaluation of the CMR properties

In an acute oral neurotoxicity screening study in rats, tebuconazole produced transient neurobehavioral effects without correlating morphological changes in neural tissues.

In a subchronic dietary neurotoxicity screening study in rats, tebuconazole did not produce any neurobehavioral symptoms or any microscopic lesions in neural tissues or skeletal muscle. In a one-generation developmental neurotoxicity study in rats, dietary concentrations of tebuconazole administered to the dams during gestation and lactation did not cause any specific neurobehavioral effects in the offspring. Clinical signs of toxicity, as well as, developmental toxicity were observed in the offspring, but only in conjunction with maternal toxicity.

In acute and subchronic neurotoxicity screening studies in rats, imidacloprid produced slight neurobehavioral effects in each study at the highest dose tested. There were no correlating morphological changes in the neural tissues in either study. In a one-generation developmental neurotoxicity screening study in rats, offspring exposed to imidacloprid showed decreased body weights and motor activities. These effects occurred only at the highest dose tested and in conjunction with maternal toxicity. There were no correlating morphological changes observed in the neural tissues.

Specific target organ toxicity (STOT) - single exposure

In chronic dietary studies in rats and dogs treated with tebuconazole, effects on the liver, spleen, adrenals and/or eyes occurred at high doses. In chronic dietary studies in rats and dogs exposed to imidacloprid, slight effects on the thyroids and/or liver were observed at high doses.

Specific target organ toxicity (STOT) - repeated exposure

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In a 3 week dermal toxicity study, rabbits treated with imidacloprid and tebuconazole showed no local or systemic effects at

levels up to and including 1000 mg/kg, the limit dose.

In a 4 week inhalation study, rats exposed to high concentrations of imidacloprid exhibited decreased body weight gains and

changes in clinical chemistries and organ weights.

In a 3 week inhalation study, rats exposed to tebuconazole exhibited liver enzyme effects at the highest concentration tested

(155.8 mg/m³).

Aspiration hazard

Not classified

SECTION 12: Ecological information

Toxicity

Do not apply directly to water. Do not contaminate surface or ground water by cleaning equipment or disposal of wastes, including equipment washwater.

LC50 - fish - 4.4 mg/l

EC50 - 4.2 mg/l

Persistence and degradability

Not established.

Bioaccumulative potential

Not readily biodegradable in water.

Mobility in soil

Absorbs into the soil.

SECTION 13: Disposal considerations

Disposal methods

Product disposal

Do not reuse empty container. Place empty container in trash. It is best to use all of the product in accordance with label directions. If it is necessary to dispose of unused product, please follow any applicable state or local guidelines. Refer to the product label for other disposal instructions. Never place unused product down any indoor or outdoor drain.

SECTION 14: Transport information

DOT (US)

Not regulated for transportation

IMDG

Not regulated for transportation

IATA

Not regulated for transportation

SECTION 15: Regulatory information

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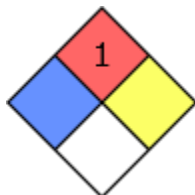
Safety, health and environmental regulations specific for the product in question

Water hazard class (WGK, Germany)

Chemical name: Tebuconazole (iso), cas number: 107534-96-3

WGK hazard class: WGK 3 - Extremely hazardous to water

NFPA Rating



SECTION 16: Other information

Further information/disclaimer

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