



MATERIAL SAFETY DATA SHEET



SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Aqualuer 20-20
EPA REG. NUMBER: 769-985
PRODUCT NUMBER: 51040, 51041, 51042, 51043, 51044

MANUFACTURER: Value Garden Supply
ADDRESS: P.O. Box 585, St. Joseph, MO 64502
WEBSITE: www.allprovectector.com

MANUFACTURER PHONE: (888) 603-1008
MANUFACTURER FAX PHONE: (952) 884-6149
EMERGENCY PHONE: (800) 858-7378

PRODUCT USE: For effective control of Adult Mosquitoes. For application by Public Health Officials and Trained Personnel of Mosquito Abatement Districts and Other Mosquito Control Programs.

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

Table with 7 columns: INGREDIENTS\*, CAS NO., % WT, OSHA TWA, OSHA STEL, ACGIH TWA, ACGIH STEL. Rows include Permethrin, Piperonyl Butoxide, Orange Oil, and Inert.

\* All ingredients in quantities > 1.0 % (0.1 % for carcinogens or teratogens) that are potentially hazardous per OSHA definitions

N/A = not applicable NE = not established

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Potential Health Effects

POTENTIAL HEALTH EFFECTS: If sufficient quantity of the product is ingested, it may be fatal. May cause irritation to the eyes, nose, throat and skin.

CARCINOGENICITY: Permethrin: A statistically significant increase of lung and liver tumors was observed in female mice receiving diets containing 375 and 750 mg/Kg/day over 85 weeks. Piperonyl Butoxide: Marginally higher incidences of benign liver tumors in mice were observed following lifetime high dose exposures.

SECTION 4: FIRST AID MEASURES

EYES: Can cause eye irritation and possible corneal injury. Immediately flush eyes with copious amounts of water and get medical attention.

SKIN: Immediately wash with soap and water. If skin irritation occurs, consult a physician.

INGESTION: May cause gastro-intestinal irritation or nausea. Do not induce vomiting. Get immediate medical attention.

INHALATION: Move person to an area of fresh air and give artificial respiration if necessary. If breathing difficulty persists, get immediate medical attention.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABILITY CLASSIFICATION: 2



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FLASH POINT: 135 F

AUTOIGNITION TEMPERATURE: N/A

EXTINGUISHING MEDIA: Carbon dioxide, foam or dry chemical

SPECIAL FIRE FIGHTING PROCEDURES: Wear full protective clothing and self-contained breathing apparatus. Evacuate nonessential personnel from the area to prevent human exposure to fire, smoke, fumes or products of combustion. Prevent use of contaminated buildings, area and equipment until decontaminated. Smother to exclude air. Do not use water. Handle as an oil fire.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

NFPA HAZARD CLASSIFICATION: HEALTH 1 FIRE 2 REACTIVITY 0 SPECIFIC N/A

NFPA HAZARD RATING CODES: INSIGNIFICANT 0 SLIGHT 1 MODERATE 2 HIGH 3 EXTREME 4

SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, to prevent contact with spilled material. For small spills, cover the spill with an absorbent material such as pet litter. Sweep up and place in an approved chemical container. Wash the spill area with water containing a strong detergent, absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal the container and handle in an approved manner. Flush the area with water to remove any residue. Do not allow wash water to contaminate water supplies.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: Store the material in a well-ventilated, secure area, out of the reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco usage, and cosmetic application in areas where there is a potential for exposure to the material. Always wash thoroughly after handling.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

The employee must wear protective clothing and related safety equipment. Good ventilation should be sufficient for most conditions. Positive pressure self contained breathing apparatus should be used for confined spaces and high exposure operations. The employee should shower at the end of the workday. The employee must wear clean clothes every day or after a spill if the clothes become contaminated. Always wash hands and face with soap and water prior to eating, drinking, smoking or using toilet facilities. It is best not to wear contact lenses but use safety prescription glasses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Light yellow/orange color VAPOR PRESSURE (mmHg): 2MMhG
ODOR: Slight Orange Odor VAPOR DENSITY (AIR = ): Over 1
PHYSICAL STATE: Liquid SPECIFIC GRAVITY: 0.842-0.846
BOILING POINT: 349 F (176 C) PERCENT VOLATILE BY VOLUME: 98%
MELTING POINT: N/A EVAPORATION RATE: 0.2 (BuAc=1)
FREEZING POINT: F AUTO IGNITION: N/A
WATER SOLUBILITY: Disperses in water Flash Point: 135 F



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### SECTION 10: STABILITY AND REACTIVITY

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**STABILITY:** Stable under most conditions, avoid temperatures over 118 F (48 C)

**INCOMPATIBILITY (MATERIAL TO AVOID):** Strong Oxidizing agents

**HAZARDOUS POLYMERIZATION:** Will not occur.

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### SECTION 11: TOXICOLOGICAL INFORMATION

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**ACUTE ORAL EFFECTS:** Oral LD50 (Rat): >500 to <5,000 mg./Kg. (female) >5,000 mg./Kg. (male)

**ACUTE DERMAL EFFECTS:** Dermal LD50 (Rat): >2,000 mg/Kg.

**CARCINOGENICITY:** Permethrin: A statistically significant increase of lung and liver tumors was observed in female mice receiving diets containing 375 and 750 mg/Kg/day over 85 weeks. Piperonyl Butoxide: Marginally higher incidences of benign liver tumors in mice were observed following lifetime high dose exposures. The significance of this observation is questionable and under review. The doses at which tumors were observed greatly exceeded human dietary intake. At anticipated dietary exposure levels, it is highly unlikely that piperonyl butoxide would result in carcinogenic effects. IARC has also concluded that there is no evidence for the carcinogenicity of white oils when administered by routes other than by interperitoneal injection. The solvent is not carcinogenic according to the OSHA Hazard Communication Standard.

**EYE EFFECTS:** Minimally irritating

**INHALATION:** 4-hour LC50 (Rat): >2.02 mg./L.

**SKIN CONTACT:** Non-irritating.

**SKIN SENSITIZE:** Permethrin is a skin sensitizer in some individuals.

**MUTAGENIC POTENTIAL:** Permethrin and Piperonyl Butoxide did not produce any mutagenic effects when tested in the Ames test.

**REPRODUCTIVE HAZARD POTENTIAL:** Permethrin and Piperonyl Butoxide were not teratogenic when tested in rats.

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### SECTION 12: ECOLOGICAL INFORMATION

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Permethrin and piperonyl butoxide are highly toxic to fish and other aquatic organisms. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark other than as instructed on the product label. Do not contaminate water by disposing of equipment washwater. Apply this product only as specified on the label.

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### SECTION 13: DISPOSAL CONSIDERATIONS

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**WASTE DISPOSAL METHOD:** Do not reuse product containers. Dispose of product containers, waste containers, and residues according to Federal, State and local health and environmental regulations.

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### SECTION 14: TRANSPORT INFORMATION

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**\*DOT HAZARD DESCRIPTION:** Terpene Hydrocarbon Solution, 3, UN2319, PG III, Marine Pollutant, (Permethrin)

HAZARD CLASS : 3  
IDENTIFICATION NO. : UN2319  
PACKAGING GROUP: III

(\*) U.S Department of Transportation

**IMO:** UN2319, TERPENE HYDROCARBONS, N.O.S., (D-LIMONENE, PERMETHRIN), 3, PGIII, MARINE POLLUTANT



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**SECTION 15: REGULATORY INFORMATION**

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**TDG STATUS:** Hazardous

**IMO STATUS:** UN2319, TERPENE HYDROCARBONS, N.O.S., (D-LIMONENE, PERMETHRIN), 3, PGIII, MARINE POLLUTANT

**IATA STATUS:** Hazardous

Permethrin (20.6%) (CAS # 52645-53-1)

Piperonyl Butoxide (20.6%) (CAS # 51-03-6)

**TSCA, DSL, EINECS, AICS, MITI, KECL, PICCS STATUS:** listed on Inventory

**INDIVIDUAL STATES:** N/A

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**SECTION 16: OTHER INFORMATION**

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This information is provided in good faith, but without express or implied warranty. For additional information, refer to the American Conference of Governmental Industrial Hygienists (ACGIH) documentation of TLV's (Threshold Limit Values) for individual components and the DOT Emergency Response Guidebook.