

# Walla Walla Environmental, Inc.

## Material Safety Data Sheet

### 1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

24-Hour Emergency Phone Number: 800-247-9011  
Product: Aquakill-5  
Product Code: 82055  
Effective Date: 2/23/04 Date Printed: 2/23/04

Walla Walla Environmental, Inc. Walla Walla, WA 99362  
Customer Information Center: 509-522-0490

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Active ingredient:  
2, 2-Dibromo-3-nitrilopropionamide CAS# 010222-01-2 5%  
Inert ingredients: 95%  
Tetraethylene glycol or polyethylene glycol mixture CAS# 000112-60-7  
CAS# 025322-68-3  
Water CAS# 007732-18-5  
Sodium bromide CAS# 007647-15-6

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

**Clear, light yellow to amber liquid. Disinfectant odor. Causes severe eye burns. Highly toxic to fish and/or other aquatic organisms. Avoid temperatures above 158F, 70C. Toxic fumes may be released in fire situations.**

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

**EYE:** May cause pain disproportionate to the level of irritation to eye tissues. May cause severe irritation with corneal injury, which may result in permanent impairment of vision, even blindness. Chemical burns may occur.

**SKIN:** Prolonged contact may cause moderate skin irritation with local redness. Repeated exposure may cause irritation, even burn. May cause more severe response if skin is abraded (scratched or cut). Prolonged skin contact is unlikely to result in absorption of harmful amounts. Has caused allergic skin reactions when tested in guinea pigs. A similar formulation did not produce a sensitization response in human volunteers.

**INGESTION:** Low toxicity if swallowed. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; however, swallowing larger amounts may cause injury.

**INHALATION:** Mist may cause irritation of upper respiratory tract (nose and throat). Trace levels of cyanogen bromide and dibromoacetonitrile vapors may be present in unvented containers and may be irritating.

**SYSTEMIC (OTHER TARGET ORGAN) EFFECTS:** Excessive exposure may increase the blood and tissue levels of bromine. Observations in animals include kidney effects following repeated ingestion, but no evidence of systemic toxicity following repeated dermal exposures at maximum attainable doses.

**CANCER INFORMATION:** No relevant information found.

**TERATOLOGY (BIRTH DEFECTS):** For the active ingredient(s). Did not cause birth defects in laboratory animals. Has not been toxic to the fetus in lab animals only at doses toxic to the mother.

**REPRODUCTIVE EFFECTS:** Contains component(s) which did not interfere with reproduction in animal studies. The component (s) is/are: 2, 2-Dibromo-3-nitropropionamide.

#### **4. FIRST AID**

**EYE:** Wash immediately and continuously with flowing water for at least 30 minutes. Remove contact lenses after the first 5 minutes and continue washing. Obtain prompt medical consultation, preferably from an ophthalmologist.

**SKIN:** Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation persists. Wash clothing before reuse. Destroy items which cannot be decontaminated, including leather articles such as shoes, belts, and watchbands.

**INGESTION:** Call a poison control center or doctor immediately for treatment advise. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center for doctor. Never give anything by mouth to an unconscious person.

**INHALATION:** Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask etc). Call a poison control center or doctor for treatment advice.

**NOTE TO PHYSICIAN:** If burn is present, treat as any thermal burn, after decontamination. No specific antidote. Supportive care. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

#### **5. FIRE FIGHTING MEASURES**

**FLAMMABLE PROPERTIES**

FLASH POINT: >200F  
METHOD USED: TCC

#### FLAMMABILITY LIMITS

LFL: Not determined  
UFL: Not determined

**HAZARDOUS COMBUSTION PRODUCTS:** Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to nitrogen oxides, hydrogen bromide, carbon monoxide, carbon dioxide.

**OTHER FLAMMABILITY INFORMATION:** This material will not burn until the water has evaporated. Residue can burn. Spills of these organic liquids on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

**EXTINGUISHING MEDIA:** To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

**MEDIA TO BE AVOIDED:** Do not use direct water stream.

**FIRE FIGHTING INSTRUCTIONS:** Keep people away. Isolate fire area and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of re-ignition has passed. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam. Contain fire water run-off if possible. Fire water run-off, if not contained may cause environmental damage. Review the "Accidental Release Measures" and the "Ecological Information" sections of this MSDS.

**PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:** Wear positive pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (including fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

#### **6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)**

**PROTECT PEOPLE:** Use appropriate safety equipment. For additional information, refer to "Exposure Controls/Personal Protection", MSDS Section 8.

**PROTECT THE ENVIRONMENT:** Contain liquid to prevent contamination of soil, surface water or ground water.

**CLEANUP:** Absorb with material such as vermiculite, Zorb-all®, Hazorb, dirt or sand. Collect material in suitable and properly labeled open containers. Remove to well

ventilated area. Attempt to neutralize by adding materials such as soda ash, sodium bicarbonate, 10% caustic and alkaline soap and water. If you have question on how to neutralize call Walla Walla Environmental at 800-247-9011.

## **7. HANDLING AND STORAGE**

**HANDLING:** Avoid contact with vapors from head space of containers. Avoid contact with mists from head space of containers. Refer to “Exposure Controls/Personal Protection”, Section 8, of the MSDS.

**STORAGE:** Store below 95F/35C. Storage must only be in original container. Keep container tightly closed when not in use.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS:** Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

### **PERSONAL PROTECTIVE EQUIPMENT**

**SKIN PROTECTION:** When prolonged or frequently repeated contact could occur, use chemically protective clothing resistant to this material. Selection of specific items such as faceshield, gloves, boots, apron, or full-body suit will depend on operation. If hands are cut or scratched, use gloves impervious to this material even for brief exposures. Remove contaminated clothing immediately, wash skin with soap and water, and launder clothing before reuse or dispose of properly. Items which cannot be decontaminated, such as shoes, belts and watchbands, should be removed and disposed of properly.

**RESPIRATORY PROTECTION:** Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required, use an approved air-purifying or positive-pressure-supplied respirator depending on the potential airborne concentration.

**EXPOSURE GUIDELINES:** Dibromonitrilopropionamide: Walla Walla Environmental 1HG is 2 mg/m<sup>3</sup> Ceiling.

Tetraethylene glycol: AIHA WEEL is 10 mg/m<sup>3</sup> for polyethylene glycols, aerosol.

Sodium bromide: Walla Walla Environmental 1HG is 10 mg/m<sup>3</sup>.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE/PHYSICAL STATE:** Clear, light yellow to amber liquid.

**ODOR:** Light disinfectant odor.

**VAPOR PRESSURE:** 4x 10<sup>-5</sup> mmHg

VAPOR DENSITY: <1 (WATER)  
BOILING POINT: Decomposes >70C  
SOLUBILITY IN WATER/MISCIBILITY: Appreciable  
SPECIFIC GRAVITY OR DENSITY: 1.10 – 1.17 @ 23C

**10. STABILITY AND REACTIVITY**

**CHEMICAL STABILITY:** Stable under recommended storage conditions. See Storage Section 7. Unstable at elevated temperatures.

**CONDITIONS TO AVOID:** Avoid temperatures above 158F/70C. Product can decompose at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

**INCOMPATIBILITY WITH OTHER MATERIALS:** Avoid contact with oxidizing materials. Avoid contact with strong bases.

**HAZARDOUS DECOMPOSITION PRODUCTS:** Hazardous decomposition products depend upon temperature, air supply and the presence of other materials. Hazardous decomposition products may include and are not limited to dibromoacetonitrile, cyanogen bromide, carbon dioxide, bromine. Toxic gases are released during decomposition.

**HAZARDOUS POLYMERIZATION:** Will not occur.

**11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)**

**SKIN:** The LD50 for skin absorption in rabbits is >2000 mg/kg.

**INGESTION:** The oral LD50 for rats is 3115 mg/kg.

**MUTAGENICITY:** For the active ingredient (s) 2, 2-Dibromo-3-nitrilopropionamide: In vitro mutagenicity studies were negative. For the major component: In vitro mutagenicity studies were negative. Animal mutagenicity studies were negative.

**12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)**

**ENVIRONMENTAL FATE**

**MOVEMENT & PARTITIONING:** Based largely or completely on component information: Bioconcentration potential is low (BCF less than 100 or Log Pow less than 3). Potential for mobility in soil is very high (Koc between 0 and 50).

**DEGRADATION & PERSISTENCE:** Based largely or completely on information for Aquakill-5. Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions. Degradation is expected in the soil environment within minutes to hours. Chemical degradation (hydrolysis) is expected in the environment within minutes to hours. Biodegradation reached in CO<sub>2</sub> Evolution Test (Modified Sturm Test, OECD Test No. 301 B) after 28 days: 78%. Based largely or completely on information for tetraethylene glycol. Biodegradation under aerobic static laboratory conditions is high (BOD<sub>20</sub> or BOD<sub>28</sub>/ThOD greater than 40%).

**ECOTOXICITY:** Based largely or completely on information for Aquakill-5. Material is highly toxic to aquatic organisms on an acute basis (LC<sub>50</sub>/EC<sub>50</sub> between 0.1 and 1.0 mg/L in most sensitive species). Based largely or completely on information for tetraethylene glycol. Material is practically non-toxic to fish on an acute basis (LC<sub>50</sub> >100 mg/L).

### **13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)**

**DISPOSAL:** DO NOT DUMP INTO SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. WALLA WALLA ENVIRONMENTAL HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THIS INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred option is to contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance. The preferred option in other jurisdictions is to contact the regulatory authority for this product for guidance.

As a service to its customers, Walla Walla Environmental can provide names of information resources to help identify waste management companies and other facilities which recycle, reprocess or manage chemicals or plastics, and that manage used drums. Telephone Walla Walla Environmental's Customer Information Center at 509-522-0490 for further details.

### **14. TRANSPORT INFORMATION**

DEPARTMENT OF TRANSPORTATION (D.O.T.): This product is not regulated by D.O.T. when shipped domestically by land.

CANADIAN TDG INFORMATION: For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or your Walla Walla Environmental representative.

**15. REGULATORY INFORMATION (Not meant to be all-inclusive – selected regulations represented)**

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

SARA 313 INFORMATION: This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

CHEMICAL NAME	CAS #	CONCENTRATION
DIBROMONITRILOPROPIONAMIDE	010222-01-2	5%

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

- An immediate health hazard
- A delayed health hazard

TOXIC SUBSTANCES CONTROL ACT (TSCA):

All ingredients are on the TSCA inventory or are not required to be listed on the TSCA inventory.

STATE RIGHT-TO-KNOW: This product is not known to contain any substances subject to the disclosure requirements of

- New Jersey
- Pennsylvania

OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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**COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT (CERCLA, OR SUPERFUND):**

To the best of our knowledge, this product contains no chemical subject to reporting under CERCLA.

**CANADIAN REGULATIONS**

**WHMIS INFORMATION:** The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

This product is exempt under WHMIS.  
**PEST CONTROL PRODUCTS ACT (Canada)**

Aquakill-5 is registered under the Pest Control Products Act.

**16. OTHER INFORMATION**

**HAZARD RATING SYSTEM:**

**NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) RATINGS:**

Health	3
Flammability	1
Reactivity	1

EPA Registration Number: 464-496-47332

MSDS STATUS: Revised Sections 3, Teratology and 8, Respiratory Protection.