



HASA ALGI-BAN

Material Safety Data Sheet

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HASA ALGI-BAN
Material Safety Data Sheet MSDS No. 204

IDENTIFICATION OF PRODUCT

Product Name:	HASA ALGI-BAN
Common Chemical Names:	TRICHLOR, Black Algaecide, Dry Algaecide
Chemical Names of Ingredients:	Trichloro-s-triazinetrione; 1,3,5-trichloro-s-triazinetrione-2, 4,6-trione
Chemical Family:	Halogenated triazines
CAS Registry Number:	87-90-1
Empirical Formula:	C ₃ N ₃ O ₃ Cl ₃

PHYSICAL AND CHEMICAL PROPERTIES

Vapor Pressure:	Very small. Impossible to measure.	Flash Point:	Not Applicable.
Weight/Gallon:	Not Applicable.	pH:	2.7-2.9
Density [liquid]:	Not Applicable.	Odor:	Slight Chlorine
Bulk Density:	0.89-1.1 g/cc	Boiling Point:	Not Applicable.
Melting Point:	225-250°C	Freezing Point:	Not Applicable.
Physical State:	Granular	Color:	White
Solubility in Water:	1.2 g/100 g H ₂ O at 25°C	Stability:	Stable
Volatiles [% by vol]:	Not Applicable.		

PHYSICAL HAZARDS

Potential for Fire:	ALGI-BAN is nonflammable.
Potential for Explosion:	Unlikely.
Reactivity:	Stable when dry.
Extinguishing Media:	Water in excess.
Fire Fighting Procedures:	SCBA plus protective clothing.

HEALTH HAZARDS	
Signs and Symptoms of Exposure:	Eye and skin irritation.
Medical Conditions Aggravated by Exposure:	No data available.
Oral [ingestion] LD₅₀:	1500 mg/kg
Dermal [skin absorption] LD₅₀:	> 10.0 g/kg.
Inhalation [breathing] LC₅₀:	Vaporization and respirable dust not expected.
Eye Irritation:	Very irritating.
Skin Irritation:	Mild irritation. Not a skin sensitizer.
OSHA PEL:	None Established.
ACGIH TLV/TWA:	None Established.

POTENTIAL ROUTE [S] OF ENTRY	
Inhalation [Breathing]:	Vaporization and respirable dust not expected.
Dermal [Skin]:	Not Anticipated.
Eyes:	Dust from tablets may irritate eyes.
Ingestion:	Not anticipated. Bitter, chlorine taste.

CARCINOGENIC [CANCER POTENTIAL] INFORMATION	
National Toxicological Program [NTP] <i>Sixth Annual Report on Carcinogens</i>:	Not listed.
International Agency for Research on Cancer [IARC] <i>Monographs, V. 1-53, Supps. 1-8</i>:	Not listed.
Listed by Federal OSHA as Carcinogens:	Not listed.
<p>Safe Drinking Water and Toxic Enforcement Act of 1986 [Proposition 65, California only]: Small quantities – less than 100 ppm (parts per million) – of impurities, including bromates, may be found in all chlorinating products, including this product. Bromates are derived from bromides, which are present in sodium chloride (table salt) from which chlorine is manufactured. Additional small quantities of bromates may be generated during the disinfection process. Bromates are known by the State of California to cause cancer when administered by the oral (drinking or ingesting) route. Read and follow label directions and use care when handling or using this product. The US Environmental Protection Agency has established a maximum contaminant level (MCL) for bromates in drinking water at 10 ppb (parts per billion). Application of this product in accordance with label directions at use dilution will not exceed this level.</p> <p>This warning is provided pursuant to Proposition 65, the Safe Drinking Water and Toxic Enforcement act of 1986, Chapter 6.6 of the California Health and Safety Code, which requires the Governor of California to publish a list of chemicals “known to the state to cause cancer or reproductive toxicity.” This list is compiled in accordance with the procedures established under the proposition, and can be obtained on the internet from California’s Office of Environmental Health Hazard Assessment at http://www.oehha.ca.gov. There are over 700 chemical substances on this list.</p>	

GENERAL PRECAUTIONS FOR SAFE USE AND HANDLING
Mix only with water. Do not mix with other chemicals. Use clean dry utensils when mixing. Do not add these tablets to any dispensing device containing remnants of other products. A violent reaction or explosion may result when chemicals are mixed. Do not contaminate with moisture other chemicals or human wastes.

PERSONAL PROTECTION AND HYGIENE
Wear goggles or face shield and rubber gloves when handling. Avoid breathing dust. Remove and wash contaminated clothing before reuse. Wash hands after handling.

CLEAN-UP OF SPILLS

ALGI BAN should be kept in tightly closed container when not in use in a cool, dry, ventilated area. Keep away from open flame and heat or heating devices. ALGIBAN which has been dropped or spilled from a container should be picked up with a clean brush or broom and dust pan and placed in a clean, dry container. If ALGIBAN is contaminated by water, other chemicals, or human waste, place the tablets in a bucket with lots of clean water and dissolve. Dissolved material may be disposed of on site or at an approved landfill. See direction on labeling. Contact HASA, Inc. for guidance.

FIRST AID

Eye Contact:	Flush with water. Remove contact lenses [if applicable]. Hold eyelids open. Continue flushing with water for 15 minutes. Get prompt medical attention.
Skin Contact:	Brush off any residue. Wash affected area with water for 5 minutes. If irritation persists, get medical attention.
Ingestion [swallowing]:	Feed bread soaked in milk followed by olive oil or other cooking oil. Call a physician immediately.
Inhalation:	Remove victim to fresh air. Call a physician.

FEDERAL/STATE LISTS/REGISTRATION/S/REPORTING REQUIREMENTS

CERCLA Hazardous Substance [Section 1010 [4], P.L. 96-510]:	Not listed.
Extremely Hazardous Substance [40 CFR 355, Appendix A]:	Not listed.
Pesticide Product 7 U.S.C. 136 et seq.:	Registered as Pesticide Product by Federal EPA.
Toxic Substance under TSCA:	Not reported.
Pesticide Product [various State Laws]:	Registered as Pesticide Product in States where marketed.

MATERIAL CLASSIFICATION

OSHA Hazard Communication Standard, Department of Labor, Occupational Safety and Health Division, 29 CFR 1910.1200:	Oxidizer
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**Hazardous Materials Transportation Regulations,
Department of Transportation (Federal) 49 CFR 172.101**

US DOT Shipping Description:	Trichloroisocyanuric acid, dry, 5.1, UN 2468, P.G. II, E.R. No. 25
Placard/Label:	5.1
Note: Inner packages containing 2.2 pounds [1kg] or less are renamed "Consumer Commodity" and reclassified as "ORM-D". Labeling and placarding are not required for these shipments.	

National Fire Protection Association NFPA 704 [1990]:	2-0-1-OX
NFPA 49:	3-0-2-OX
BOCA National Fire Prevention Code/National Building Code [1999 editions]:	Oxidizer Class 1
Standard Fire Prevention Code/Standard Building Code [1997 editions]:	Oxidizer Class 1
Uniform Fire Code/Uniform Building Code [1997 editions]:	Oxidizer Class 1
Uniform Fire Code Standards 79-3, Uniform Fire Code, V. II [1997 edition]:	2-0-1-OX

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