

**IVORYCHEM PTE LIMITED**

15 Beach Road #02-09, Beach Centre
Singapore 189677
Tel: +65 – 6337 7765
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Email: contact@ivorychem.com
Web: www.ivorychem.com
Co. Registration No. 200405572W
GST Registration No. 200405572W

MATERIAL SAFETY DATA SHEET**ANTICHOKE 500 SC HERBICIDE**

Version: Global
Date Approved: 08/13/1998
Revision No: 1

CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: ANTICHOKE® 500 SC HERBICIDE
ACTIVE INGREDIENT: Atrazine
CHEMICAL FAMILY: NA
CHEMICAL NAME OF ACTIVE INGREDIENT(S): Atrazine (42.9%): 2-chloro-4-ethylamino-6-isopropylamino-striazine (CAS #: 1912-24-9)
MOLECULAR FORMULA: NA
SYNONYMS: NA

MANUFACTURER

IVORYCHEM PTE LTD
15 Beach Road, #02-09
Beach Centre
Singapore 189677
Tel: +65 63377765
Fax: +65 63377730

Emergency Telephone Numbers:

Emergency Phone contact@ivorychem.com (Please refer local label for Emergency Numbers in your region).

COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS #	Wt.%	PEL/TLV	EC No.	EC Class
Atrazine	10265-92-6	50	None	None	None
Other ingredients	-	50	None	None	None

HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: CAUTION. Harmful if swallowed, inhaled or absorbed through skin. Do not breathe vapors or spray mist. Avoid contact with eyes, skin, or clothing.

SYMPTOMS OF ACUTE EXPOSURE: Exposure may cause mild irritation of eyes, skin or respiratory tract. If swallowed, nausea, vomiting, or diarrhea can result. A skin sensitization (allergic) reaction may occur in some individuals.

HAZARDOUS DECOMPOSITION PRODUCTS: None known

PHYSICAL PROPERTIES: Appearance: White liquid. Odor: Faint odor

UNUSUAL FIRE, EXPLOSION AND REACTIVITY HAZARDS: Thermal decomposition products



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may include, but are not limited to, carbon monoxide, hydrogen cyanide, and acetonitrile. This product is a NFPA Class IIIB Combustible Liquid.

FIRST AID MEASURES

IF SWALLOWED: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious or convulsing person.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. Call a poison control center or doctor for further treatment advice.

IF ON SKIN OR CLOTHING: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.

IF IN EYES: • 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.

NOTE TO PHYSICIAN: If ingested, induce emesis or lavage stomach. Treat symptomatically.

Have the product container or label with you when calling a poison control center or doctor or going for treatment.

FIRE FIGHTING MEASURES

FLASH POINT: >200°F (TCC)

FLAMMABLE LIMITS (% IN AIR): Lower: %; Upper: % Not Applicable

AUTOIGNITION TEMPERATURE: Not Applicable

FLAMMABILITY: Not Applicable

FIRE & EXPLOSION HAZARD: Thermal decomposition products may include, but are not limited to, carbon monoxide, hydrogen cyanide, and acetonitrile. This product is a NFPA Class IIIB Combustible Liquid.

FIRE-FIGHTING EQUIPMENT: Use dry chemical, foam, or CO2 extinguishing media. 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.

ACCIDENTAL RELEASE MEASURES

ACTION TO TAKE FOR SPILLS/LEAKS: Wear chemical safety glasses with side shields or chemical goggles, rubber gloves, rubber boots, long-sleeved shirt, long pants, head covering, and a NIOSH-approved chemical cartridge pesticide respirator with dust/mist pre-cartridges or a self-contained breathing apparatus (SCBA). For small spills cover 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. Do not contaminate water, food, or feed by disposal or cleaning of equipment.



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HANDLING AND STORAGE

HANDLING: Do not contaminate water, food, or feed by storage or disposal or cleaning of equipment. Avoid contact with skin or eyes. Wash thoroughly with soap and water after handling. Do not store, use, and/ or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.

STORAGE: Do not store, use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Ground water contamination may be reduced by diking and flooring of permanent liquid bulk storage sites with an impermeable material. Do not allow product to freeze. Store above -5°C (23°F).

STORAGE TEMPERATURE (MIN/MAX):

Minimum: 23°F (-5°C)

Maximum: Normal ambient temperatures.

EXPOSURE CONTROLS / PERSONAL PROTECTION

THE FOLLOWING RECOMMENDATIONS FOR EXPOSURE CONTROLS/PERSONAL PROTECTION ARE INTENDED FOR THE MANUFACTURE, FORMULATION AND PACKAGING OF THE PRODUCT. FOR COMMERCIAL APPLICATION AND ONFARM APPLICATIONS, CONSULT THE PRODUCT LABEL.

INGESTION: 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.

EYE CONTACT: To avoid eye contact, wear safety glasses with side shields or chemical goggles.

SKIN CONTACT: To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, long pants and a head covering.

INHALATION: To avoid breathing mist or spray, wear a NIOSH-approved chemical cartridge pesticide respirator with dust/mist pre-cartridges or a supplied-air respirator.

USER SAFETY RECOMMENDATIONS: Users should: Wash hands before eating, drinking, chewing gum, using tobacco, or using the toilet. Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.

ENGINEERING CONTROLS: Refer to product label.

PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: White Liquid

ODOR: Faint Odor

MELTING POINT: Not Applicable

BOILING POINT: $100-106^{\circ}\text{C}$

RELATIVE DENSITY: 1.103 @ 22°C

VAPOR PRESSURE: Atrazine: $3.85\text{E}-02$ mPA @ 25°C

pH: 6-8.7 @ 25°C

STABILITY AND REACTIVITY

STABILITY: Stable under normal ambient and anticipated storage conditions.

HAZARDOUS POLYMERIZATION: Will Not Occur

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CONDITIONS TO AVOID: Do not allow product to freeze. Store above -5°C (23°F).
HAZARDOUS DECOMPOSITION PRODUCTS: None Known

TOXICOLOGICAL INFORMATION**ACUTE TOXICITY/IRRITATION STUDIES:**

Ingestion: Oral LD50 (Rat)
Females: 972 mg/kg body weight
Males: between 1,000 & 3,000 mg/kg body weight
Dermal: Dermal LD50 (rabbit) >5,000 mg/kg body weight
Inhalation: Inhalation LC50 (rat) 2.13 mg/L (4 hrs)
Eye irritation: Mildly irritating
Dermal irritation: Non-irritating
Skin sensitization: Not a contact sensitizer

MUTAGENIC POTENTIAL: ATRAZINE: Not mutagenic

REPRODUCTIVE HAZARD POTENTIAL: ATRAZINE: No adverse reproductive affects observed.

CHRONIC/SUBCHRONIC TOXICITY STUDIES: ATRAZINE: Cardiotoxicity in Long Term Study with High Doses (Dogs)

CARCINOGENIC POTENTIAL: ATRAZINE: Mammary Tumors (Female Sprague-Dawley Rats), Sex and Strain Specific None Observed (Male Sprague-Dawley Rats, F-344 Rats or Mice)

TARGET ORGANS: ATRAZINE: Heart

ECOLOGICAL INFORMATION

SUMMARY OF EFFECTS: Slight toxicity to fish and wildlife

ECO-ACUTE TOXICITY**Atrazine:**

Rainbow Trout 96-hours LC50 = 9.9 mg/L
Bluegill Sunfish 96-hours LC50 = 42 mg/L
Bobwhite Oral LD50 940 mg/kg
Bobwhite 8-day Dietary LC50 >5,000 ppm
Mallard 8-day Dietary LC50 >5,000 ppm
Invertebrate Ceriodaphnia dubia 48 HR LC50 4.9 mg A.I./L
Peking Duck LD50 >10,000 mg/kg
Bees LC50 > Φ 100 g/bee

ECO-CHRONIC TOXICITY**Atrazine:**

Fish (Fathead minnow) Early Life Stage MATC >0.25 and <0.46 mg A.I./L
Mallard Reproduction NOEC 225 ppm a.i.
Bobwhite Reproduction NOEC 225 ppm a.i.
Invertebrate (Ceriodaphnia dubia) Life Cycle NOEL 2.5 ppm

ENVIRONMENTAL FATE

No data available for the formulation. The information presented here is for the active ingredient, atrazine. A thorough review of environmental information is not possible in this document.

ENVIRONMENTAL PERSISTENCE/MOBILITY: Stable in sterile water, both in the light and dark. In laboratory soil, degrades slowly under both aerobic and anaerobic conditions in the dark (t1

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2~5 mo.); more rapidly in the light (t1 2~45 d). Exhibits medium to very high mobility with four soil textures (Koc = 39 to 155).

DISPOSAL CONSIDERATIONS

PESTICIDE DISPOSAL: Open dumping is prohibited. Wastes resulting from the use of this product are acutely toxic. Improper disposal of unused pesticide, spray mixture, or rinsate is a violation of federal law. Pesticide, spray mixture, or rinsate that cannot be used according to label instructions must be disposed of according to Federal, State, or local procedures. For guidance in proper disposal methods, contact your State Pesticide or Environmental Control Agency or the Hazardous Waste representative at the nearest EPA Regional Office.

CONTAINER DISPOSAL: Triple rinse (or equivalent) and offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill, or by incineration, or by open burning, if allowed by state and local authorities. If burned, keep out of smoke. For minor spills, leaks, etc., follow all precautions indicated on this label and clean up immediately. Take special care to avoid contamination of equipment and facilities during cleanup procedure and disposal of wastes.

TRANSPORT INFORMATION**DOT CLASSIFICATION:**

Non-bulk: Not regulated

B/L FREIGHT CLASSIFICATION: Item 50320 [Compounds; Weed Killing (Herbicide), NOI, Other than poison], Class 60

Bulk: Not regulated

B/L FREIGHT CLASSIFICATION: Item 50320 [Compounds; Weed Killing (Herbicide), NOI, Other than poison], Class 60

INTERNATIONAL TRANSPORTATION:

MO (vessel): Not regulated

IATA (air): Not regulated

REGULATORY INFORMATION**SARA TITLE III CLASSIFIED:**

Section 302: Not applicable

Section 311/312:

Acute Health Hazard

Chronic Health Hazard

Section 313 chemical(s): Atrazine (42.9%) (CAS No. 1912-24-9)

CA PROPOSITION 65: Not applicable

CERCLA REPORTABLE QUANTITY (RQ): None

RCRA CLASSIFICATION: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or derived from the product should be classified as a hazardous waste.

TSCA: Exempt from TSCA.

OTHER INFORMATION

Company Registration No: 200405572W
Incorporated in the Republic of Singapore Under the Companies Act (Cap 50)



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Section(s) Revised : New Format