

Union Carbide Agricultural Products Company, Inc. LIST
 MATERIAL SAFETY DATA SHEET

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Each customer should study this Material Safety Data Sheet and become aware of the Product hazards. Reference works or personnel who are expert on ventilation, toxicology, and fire prevention may have to be consulted to adequately utilize the data contained in this Material Safety Data Sheet.

To promote safe handling, each Customer should (1) notify its employees, agents, and contractors of the information on this Material Safety Data Sheet, and any Product hazards and safety information, (2) furnish a copy of this Material Safety Data Sheet to each of its customers for the Product, and (3) request such customers to notify their employees and customers for the Product of the information on this Material Safety Data Sheet and any Product hazards and safety information.

I. IDENTIFICATION

PRODUCT NAME : AMITROL-™ LIQUID HERBICIDE
CHEMICAL NAME : 3-amino-1,2,4-triazole
CHEMICAL FAMILY : Triazole
FORMULA : $C_2H_4N_4$
MOLECULAR WEIGHT : 84.08
SYNONYMS : Aminotriazole, amitrole
CAS NUMBER : 61-82-5
CAS NAME : 1 H-1,2,4-triazole--amine

II. PHYSICAL DATA

BOILING POINT : Not available
SPECIFIC GRAVITY : 1.110
(Water = 1)
APPEARANCE AND ODOR : Light yellow to clear; characteristic odor

EMERGENCY PHONE NUMBER
1-800-822-4357

This number is available days, nights, weekends, and holidays.

UNION CARBIDE AGRICULTURAL PRODUCTS COMPANY, INC.
P.O. Box 12014 • T.W. Alexander Drive
Research Triangle Park, NC 27709

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II. PHYSICAL DATA (CONTINUED)

FREEZING POINT : Not available
VAPOR DENSITY : (Air = 1) Not available
VAPOR PRESSURE : Not available
SOLUBILITY IN WATER : (% by wt.) 100%
EVAPORATION RATE : (Butyl Acetate = 1) <1

III. HAZARDOUS INGREDIENTS

MATERIAL	%	TLV (Units)	HAZARD
3-amino-1,2,4-triazole	21.6	OSHA: None established ACGIH: (proposed) 0.2mg/m ³ TWA ₈	See Section V Health Hazard Data

IV. FIRE AND EXPLOSION HAZARD DATA

AUTOIGNITION TEMPERATURE : None
EXPLOSIBILITY :
EXTINGUISHING MEDIA : Water fog, carbon dioxide foam or dry chemical
FLAMMABLE LIMITS IN AIR : LFL: None UFL: None
FLASH POINT (Method) : None
SPECIAL FIRE FIGHTING PROCEDURES : None
UNUSUAL FIRE AND EXPLOSION HAZARDS : None

V. HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE : 0.2 mg/m³ TWA₈ Proposed by ACGIH
None established by OSHA (See Other Health Hazards on page 3)

TOXICOLOGY DATA : LD₅₀ (rat) 3,500 mg/kg of body weight

EFFECTS OF EXPOSURE

Minimally irritating thru skin and eye contact; only slightly toxic by skin contact or oral exposure. (See Other Health Hazards on page 3.)

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V. HEALTH HAZARD DATA (CONTINUED)

OTHER HEALTH HAZARDS

This product contains amitrole which has been determined to cause cancer in laboratory animals. Amitrol has caused goiter in animals. This product may affect thyroid function. Overexposure can be determined by monitoring thyroid function. If worker is under treatment for hypo- or hyperthyroidism, he should be removed from exposure until euthyroid state is achieved.

EMERGENCY AND FIRST AID PROCEDURES

- SWALLOWING : Seek medical attention and treat symptomatically.
- SKIN : Wash skin with soap and water. Get medical attention if irritation persists.
- INHALATION : Remove to fresh air. Get medical attention if irritation persists.
- EYES : Wash eyes with flowing water. Get medical attention if irritation persists.

VI. REACTIVITY DATA

- STABILITY : Stable
- INCOMPATIBILITY : Consult manufacturer for specific cases.
(materials to avoid)
- HAZARDOUS COMBUSTION OR :
DECOMPOSITION PRODUCTS
- HAZARDOUS POLYMERIZATION : Will not occur

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VII. SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED

Dike large spills. Absorb small spills on inert material such as sand or vermiculite. Use prescribed protective equipment.

WASTE DISPOSAL METHOD

Bury in an approved landfill following all applicable federal, state, and local regulations. Read and follow label instructions.

VIII. SPECIAL PROTECTION INFORMATION

- RESPIRATORY PROTECTION : NIOSH-approved respirator for pesticide mists when cleaning up spills
- VENTILATION : Mechanical (general) ventilation to control mists
- PROTECTIVE GLOVES : Rubber or plastic.
- EYE PROTECTION : Safety glasses with side shields.
- OTHER PROTECTIVE EQUIPMENT : Clean, body-covering clothing. See label instructions if you are applying this material.

IX. SPECIAL PRECAUTIONS

PRECAUTIONARY LABELING

Keep out of reach of children. Read the container label and follow directions. Avoid spray drift. Do not apply where water will be used for irrigating, drinking, fishing, or other domestic purposes.

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IX. SPECIAL PRECAUTIONS (CONTINUED)

OTHER PRECAUTIONS

Do not store near insecticides, fungicides, fertilizers, or seeds. Do not use in a greenhouse. Do not allow spray solution to remain in a sprayer any longer than necessary. For retail sale and application only by certified applicators or personnel under their direct supervision.

The opinions expressed herein are those of qualified experts within Union Carbide Agricultural Products Company, Inc. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Because the use of this information and these opinions and the conditions of use of the Product are not within the control of Union Carbide Agricultural Products Company, Inc., it is the user's obligation to determine the conditions of safe use of the product.

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