

SAFETY DATA SHEET

3-AMINO-1H-1,2,4-TRIAZOLE

SECTION 1: CHEMICAL AND COMPANY IDENTIFICATION

BioShop Canada Inc.
5480 Mainway
Burlington, Ontario L7L 6A4
1-800-234-1179
Emergency Telephone No.: 1-905-466-3832
Chemical Name: 3-amino-1H-1,2,4-triazole (3-AT)
Catalog Number: ATT124

SECTION 2 HAZARDS IDENTIFICATION

GHS Classification

Skin irritation (Category 3)
Eye irritation (Category 2B)
Reproductive toxicity (Category 2)
Acute aquatic toxicity (Category 2)
Chronic aquatic toxicity (Category 2)

Pictogram:



Signal word Warning

Hazard statement

H316 Causes mild skin irritation.
H320 Causes eye irritation.
H361 Suspected of damaging fertility or the unborn child.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statement

P273 Avoid release to the environment.
P281 Use personal protective equipment as required.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Potential Health Effects

Routes of entry: Eyes, skin, inhalation, Ingestion.

Target Organs: Kidneys, liver, thyroid , skin.

Eyes: causes eye irritation.

Skin: causes skin irritation. May cause rashes.

Inhalation: Causes burns. May cause severe irritation to respiratory tract.

May cause sore throat and lung edema

Ingestion: May be harmful if swallowed. May cause GI irritation. May cause

vomiting and diarrhea.

CHRONIC HEALTH HAZARDS; May cause cancer according to animal studies. May cause reproductive and fetal effects. Repeated exposure may cause cancer. Suspected carcinogen.

SECTION 3 COMPOSITION/ INGREDIENTS

	CAS #	%
3-AT	61-82-5	>95%

Molecular Formula: C₂H₄N₄

Molecular Weight: 84.08

SECTION 4 FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes. GET MEDICAL AID.

Skin: Flush area immediately with plenty of soap and water while removing contaminated clothing and shoes..

Inhalation: Remove victim to fresh air. If not breathing give artificial respiration. If breathing is difficult give oxygen . GET MEDICAL ATTENTION.

Ingestion: Wash mouth with water. GET MEDICAL ATTENTION .

SECTION 5 FIRE FIGHTING MEASURES

Flammable: No

Flash Point: N/A

Autoignition Temperature: N/A

Extinguishing Media: Use water spray, foam, dry chemical or carbon dioxide.

Explosion Data: Not available

SECTION 6 ACCIDENTAL RELEASE MEASURES

Ventilate the area. Wear appropriate protective equipment. Sweep and place in a closed container. In the event of a fire always wear self-contained breathing apparatus, NIOSH/MSHA approved or equivalent.

Leak and Spill Procedures: Ventilate the area. Wear appropriate protective equipment. Cover with dry lime or soda. Sweep and place in a closed container

SECTION 7 HANDLING AND STORAGE

Handling: Avoid contact. Do not get in eyes, on skin, or clothing. Wash thoroughly after handling. Wash contaminated clothing before reuse. Minimize dust generation.

Storage Conditions: Room temperature.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits:

ACGIH: 0.2 mg/m³

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NIOSH 0.2 TWA

OSHA: none

Use adequate ventilation. AVOID DUST GENERATION.

Wear appropriate protective equipment to prevent eye and skin exposure.

Wear appropriate respirator to prevent lung irritation.

Personal Protection: Lab coat, safety goggles, rubber gloves.

Ventilation: Local exhaust systems. Use fume hood

Respiratory protection: use OSHA/MSHA approved respirator.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Crystalline powder

Appearance and Odor: white to off white, odorless

Melting Point: 153-156C

Boiling Point: N/A

Specific Gravity: N/A

Vapor Density: N/A

Vapor pressure: 0.05 mm Hg

Water Solubility: yes

pH: 6.5-7.5

SECTION 10 STABILITY AND REACTIVITY:

Stability: Stable at normal room temperature and pressure decomposes with exposure to light

Incompatibility: strong oxidizing agents. Strong acids and bases. Light excess heat.

Hazardous Decomposition Products: Thermal decomposition may produce toxic fumes of, carbon monoxide, nitrogen oxides

Hazardous Polymerization: Has not been reported

SECTION 11 TOXICOLOGICAL PROPERTIES

Exposure Limits:

LD50 / LC50:

Oral mouse: LD50= 14700 mg/kg

Oral rat: LD50= 1100 mg/kg

Skin, rat: LD50=>10 g/kg

Epidemiology:

Oral rat; TDLo= 4595 mg/kg/2.5Y-C

Oral mouse:TDLo=113g/kg/3W-I

Teratogenicity:

Oral rat: TDLo=700ug/kg (female 22 days after conception)

Oral mouseTDLo=1935 mg/kg (female 6-14 days after conception)

Reproductive Effects: No data available

Neurotoxicity: No data available

Mutagenicity:

DNA inhibition: Human fibroblast= 100 mmol/L

Morphological Transformation in rat embryo: 80mg/L, Hamster, kidney:

250mg/L;mammalian Somatic cells in Hamster embryo=1mg/L.

SECTION 12 ECOLOGICAL INFORMATION

Highly toxic to fish.

Avian toxicity: Oral mallard duck: LD50: 2000 mg/kg

SECTION 13 DISPOSAL CONSIDERATION

Waste Disposal: Burn in chemical incinerator. Observe all Federal, provincial and local regulations.

SECTION 14 TRANSPORT INFORMATION

Shipping Information: Not regulated

SECTION 15 REGULATORY INFORMATION

US : TSCA: listed

European/International: Risk phrase: Harmful, Toxic to aquatic life

Canada: WHMIS: **D2A**

SECTION 16 ADDITIONAL INFORMATION

Prepared By: M.Kierdelewicz (President)

Date Prepared: Jan 1/2025

Phone: (800) 234-1179

The information provided on this Material Safety Data Sheet is furnished in good faith and without warranty of any kind. The above information is believed to be correct and should be used only as a guide. BioShop Canada Inc. shall not be held liable for any damage resulting from the handling or from the contact with the above product.

Observe all federal, provincial and state laws concerning health, safety and pollution.