

ALFAAL01356

# 2-Acetamido-5-nitrothiazole

## SECTION 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

产品说明:	2-乙酸胺基-5-硝基噻唑
Product Description:	2-Acetamido-5-nitrothiazole
Cat No. :	<b>L01356</b>
CAS No	140-40-9
Molecular Formula	C5 H5 N3 O3 S
Supplier	Alfa Aesar Avocado Research Chemicals, Ltd. Shore Road Port of Heysham Industrial Park Heysham, Lancashire LA3 2XY United Kingdom Office Tel: +44 (0) 1524 850506 Office Fax: +44 (0) 1524 850608
Emergency Telephone Number	Call Carechem 24 at +44 (0) 1865 407333 (English only); +44 (0) 1235 239670 (Multi-language)
E-mail address	uktech@alfa.com www.alfa.com Product Safety Department
Recommended Use	Laboratory chemicals.
Uses advised against	No Information available

## **SECTION 2. HAZARD IDENTIFICATION**

**Physical State** Solid

Appearance Yellow

Odor No information available

**Emergency Overview** Harmful if swallowed.

## Classification of the substance or mixture

Acute Oral Toxicity

Label Elements



Signal Word

Warning

Category 4

## 2-Acetamido-5-nitrothiazole

#### Hazard Statements H302 - Harmful if swallowed

H302 - Harmful If Swallowed

## Precautionary Statements

## Prevention

P264 - Wash face, hands and any exposed skin thoroughly after handling
P270 - Do not eat, drink or smoke when using this product **Response**P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P330 - Rinse mouth **Storage**P403 - Store in a well-ventilated place **Disposal**P501 - Dispose of contents/ container to an approved waste disposal plant

#### Physical and Chemical Hazards None identified. Health Hazards Harmful if swallowed.

#### Environmental hazards

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. Is not likely mobile in the environment due its low water solubility. Spillage unlikely to penetrate soil.

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
Aminitrozole	140-40-9	<=100

## SECTION 4. FIRST AID MEASURES

#### General Advice

If symptoms persist, call a physician.

#### Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

#### Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

#### Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

#### Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

#### Most important symptoms and effects

None reasonably foreseeable.

### Self-Protection of the First Aider

No special precautions required.

## Notes to Physician

Treat symptomatically.

#### **SECTION 5. FIRE-FIGHTING MEASURES**

## Suitable Extinguishing Media

### 2-Acetamido-5-nitrothiazole

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Extinguishing media which must not be used for safety reasons No information available.

#### **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## **SECTION 6. ACCIDENTAL RELEASE MEASURES**

#### **Personal Precautions**

Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation.

#### **Environmental Precautions**

Should not be released into the environment. See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up

Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal.

Refer to protective measures listed in Sections 8 and 13.

## **SECTION 7. HANDLING AND STORAGE**

#### Handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Avoid ingestion and inhalation. Avoid dust formation. Do not get in eyes, on skin, or on clothing.

#### Storage

Keep container tightly closed in a dry and well-ventilated place.

#### Specific Use(s)

Use in laboratories

## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

#### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

### Exposure Controls

#### Engineering Measures

None under normal use conditions. .

#### Personal protective equipment

Eye ProtectionWear safety glasses with side shields (or goggles) (European standard - EN 166)Hand ProtectionProtective gloves

# **SAFETY DATA SHEET**

2-Acetamido-5-nitrothiazole

Glove material Break	through time	Glove thickness	EU standard	Glove comments			
	nanufacturers	-	EN 374	(minimum requirement)			
	nmendations						
Natural rubber							
PVC							
Inspect gloves before use.	o a o r din a n o rm	aphility and broakthr	augh time which are pro	avided by the supplier of the alerge			
(Refer to manufacturer/supplier f			ough time which are pro	ovided by the supplier of the gloves.			
Ensure gloves are suitable for th			terity. Operational cond	litions. User susceptibility e.a.			
sensitisation effects also take in	to consideration	n the specific local co	anditions under which the	ne product is used, such as the danger			
of cuts, abrasion.				le product is used, such as the danger			
Remove gloves with care avoidir	ng skin contami	nation.					
3	5						
Skin and body protection Long sleeved clothing							
<b>Respiratory Protection</b>	No protective equipment is needed under normal use conditions.						
Large scale/emergency us	are exceeded or if irritation or other symptoms are experienced						
	Recom	mended Filter type:	Particle filter				
Small scale/Laboratory use	atory use Maintain adequate ventilation						
Hygiene Measures	Handle	in accordance with g	ood industrial hygiene a	and safety practice.			
<b>F</b>	ala Niaistan						
Environmental exposure contr	ois No infor	mation available.					
	SECTION 9.	PHYSICAL AND	CHEMICAL PROPER	RTIES			

Appearance Physical State	Yellow Solid	
Odor Odor Threshold pH Melting Point/Range Softening Point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Explosion Limits	No information available No data available No information available 263 °C / 505.4 °F No data available No information available No information available Not applicable No information available No data available	<b>Method -</b> No information available Solid
Vapor Pressure Vapor Density Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wat		Solid
Autoignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	No data available No data available Not applicable No information available No information available	Solid
Molecular Formula Molecular Weight	C5 H5 N3 O3 S 187.18	

2-Acetamido-5-nitrothiazole

## SECTION 10. STABILITY AND REACTIVITY

Stability	Stable under normal conditions.
Hazardous Reactions Hazardous Polymerization	None under normal processing. No information available.
Conditions to Avoid	None known.
Materials to avoid	No information available.

Hazardous Decomposition Products None under normal use conditions.

## **SECTION 11. TOXICOLOGICAL INFORMATION**

### Product Information

(a) acute toxicity;	(a)	acute	toxicity;
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Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Aminitrozole	LD50 > 400 mg/kg (Rat)		
(b) skin corrosion/irritation;	No data available		
(c) serious eye damage/irritation;	No data available		
(d) respiratory or skin sensitization; Respiratory Skin	No data available No data available		
(e) germ cell mutagenicity;	No data available		
(f) carcinogenicity;	No data available		
	There are no known carcinoge	enic chemicals in this product	
(g) reproductive toxicity;	No data available		
(h) STOT-single exposure;	No data available		
(i) STOT-repeated exposure;	No data available		
Target Organs	No information available.		
(j) aspiration hazard;	Not applicable Solid		
Symptoms / effects,both acute and delayed	No information available		

## **SECTION 12. ECOLOGICAL INFORMATION**

## 2-Acetamido-5-nitrothiazole

## **Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Aminitrozole				EC50 = 0.86 mg/L 30
				min
				EC50 = 1.49 mg/L 15
				min
				EC50 = 6.34 mg/L 5 min

Persistence and Degradability Persistence	Insoluble in water.
Bioaccumulative Potential	May have some potential to bioaccumulate
Mobility in soil	Spillage unlikely to penetrate soil Is not likely mobile in the environment due its low water solubility
Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential	This product does not contain any known or suspected endocrine disruptors This product does not contain any known or suspected substance This product does not contain any known or suspected substance
	SECTION 13. DISPOSAL CONSIDERATIONS
Waste from Residues/Unused Products	Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.
Contaminated Packaging	Dispose of this container to hazardous or special waste collection point.
Other Information	Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains.
	SECTION 14. TRANSPORT INFORMATION
Road and Rail Transport	Not Regulated
IMDG/IMO	Not regulated
IATA	Not regulated

Special Precautions for User

No special precautions required

## SECTION 15. REGULATORY INFORMATION

#### **International Inventories**

X = listed, China (IECSC), Europe (EINECS/ELINCS/NLP), U.S.A. (TSCA), Canada (DSL/NDSL), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), Korea (KECL).

ſ	Component	The	List of	TCSI	IECSC	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	AICS	KECL
		Inventory of	dangerous										
		Hazardous	goods GB										

2-Acetamido-5-nitrothiazole

	Chemicals (2015 Edition)	12268 - 2012										
Aminitrozole	-	-	Х	-	205-414-7	-	-	-	Х	Х	Х	-

### **National Regulations**

## **SECTION 16. OTHER INFORMATION**

Prepared By
Revision Date
<b>Revision Summary</b>

Health, Safety and Environmental Department 12-Feb-2021 Not applicable.

#### Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Legend	

CAS - Chemical Abstracts Service EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances	<ul> <li>TSCA - United States Toxic Substances Control Act Section 8(b) Inventory</li> <li>al DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List</li> <li>ENCS - Japanese Existing and New Chemical Substances</li> <li>AICS - Australian Inventory of Chemical Substances</li> <li>NZIOC - New Zealand Inventory of Chemicals</li> </ul>
WEL - Workplace Exposure Limit ACGIH - American Conference of Governmental Industrial Hygienists DNEL - Derived No Effect Level RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration PBT - Persistent, Bioaccumulative, Toxic	<ul> <li>TWA - Time Weighted Average</li> <li>IARC - International Agency for Research on Cancer</li> <li>Predicted No Effect Concentration (PNEC)</li> <li>LD50 - Lethal Dose 50%</li> <li>EC50 - Effective Concentration 50%</li> <li>POW - Partition coefficient Octanol:Water</li> <li>vPvB - very Persistent, very Bioaccumulative</li> </ul>
ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code OECD - Organisation for Economic Co-operation and Development BCF - Bioconcentration factor	ICAO/IATA - International Civil Aviation Organization/International Air Transport Association MARPOL - International Convention for the Prevention of Pollution from Ships ATE - Acute Toxicity Estimate VOC (volatile organic compound)

## Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

#### Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

# End of Safety Data Sheet