

## SAFETY DATA SHEET

PRODUCT NAME: ZAZAFLY

## 1. IDENTIFICATION

Product Identifier: Azamethiphos  
Other means of identification: Azamethiphos 1% G, ZAZAFLY  
Use: Insecticide

Supplier: Zagro Singapore Pte Ltd  
Address: Zagro Global Hub  
5 Woodlands Terrace  
Singapore 738430  
Tel./Emergency contact: +65 6759 1811  
Fax: +65 6759 1855

## 2. HAZARDS IDENTIFICATION

## GHS Classification

Acute Toxicity  
Oral: Category 5  
Dermal: Category 5

Skin Irritation: Category 3  
Eye Irritation: Category 2B

## GHS label elements



Signal Word: WARNING

## Hazard Statements

H303: May be harmful if swallowed.  
H313: May be harmful in contact with skin.  
H333: May be harmful if inhaled.  
H316: Causes mild skin irritation.  
H320: Causes eye irritation.

**Precautionary Statements**

- P102: Keep out of reach of children.  
 P233: Keep container tightly closed.  
 P264: Wash your hands and face thoroughly after handling.  
 P270: Do not eat, drink or smoke when using the product.  
 P280: Wear protective gloves/protective clothing/eye protection/ face protection.

**Response**

P301+P330+P331+P310: If swallowed: Rinse mouth. Do not induce vomiting. Immediately call a doctor/physician.

P302+P352+P312: If on skin: Wash with plenty of soap and water. Call a doctor/physician if you feel unwell.

P303+P361+P353: If on skin (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340+P310: If inhaled: Move to fresh air and keep at rest in a position comfortable for breathing. Immediately call a doctor/physician.

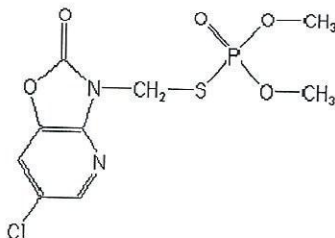
P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

**Storage**

- P403+P233: Store in a well-ventilated place. Keep container tightly closed.  
 P405: Store locked up.

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Chemical Identification	:	Azamethiphos
Molecular Formula	:	C <sub>9</sub> H <sub>10</sub> ClN <sub>2</sub> O <sub>5</sub> PS
Molecular Weight	:	324.68
CAS No.	:	35575-96-3
Synonyms/Chemical Name (IUPAC)	:	S-6-chloro-2,3-dihydro-2-oxo-1,3-oxazolo[4,5-b]pyridin-3-ylmethyl O,O-dimethyl phosphorothioate
Chemical Structure	:	



Component and composition : 1% w/w

---

#### 4. FIRST AID MEASURES

##### **Ingestion**

If swallowed: Call a poison control center or doctor immediately for treatment advice. Give patient 1 or 2 glasses of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Do not induce vomiting or give anything by mouth to an unconscious or convulsing person. Seek medical advice immediately.

##### **Inhalation**

Move patient to fresh air. Keep rested until recovered. Seek medical advice.

##### **Eyes Contact**

If in eyes: Rinse immediately with clean water, including under eyelids, for at least 15 minutes and obtain medical advice.

##### **Skin Contact**

If on skin or clothing: Remove contaminated clothing. Wash skin immediately with soap and plenty of water for 15-20 minutes.

##### **Notes to Physician**

Treat as a cholinesterase inhibitor. Atropine sulphate is antidotal. Inject 2-4 mg atropine sulphate ( for children 0.5-2 mg according to age) i.v. or i.m. every 5-10 minutes until signs of atropinisation occur. The patient must remain atropinised for 24-48 hours to prevent subsequent poisoning due to delayed resorption.

---

#### 5. FIRE FIGHTING MEASURES

##### **Extinguishing media**

Dry chemical, foam, water spray, carbon dioxide.

##### **Special Fire Fighting Procedures**

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. Water runoff can cause environmental damage. If water is used to fight fire, dike and collect runoff.

##### **Hazardous combustion products**

Non-combustible solid. Decomposes on heating emitting toxic fumes.

---

#### 6. ACCIDENTAL RELEASE MEASURES

##### **Personal precautions, protective equipment and emergency measures**

When using the product, wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow-length PVC gloves. If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product on skin, immediately wash area with soap and water. Wash hands after use. After each day's use, wash gloves and contaminated clothing. Do not contaminate water sources.



### Environmental precautions

The chemical substance should not be released into the environment (water, soil).

### Methods and materials for containment and cleaning up

Prevent spill from spreading or entering waterways or drains. Take up with absorbent material such as sawdust, peat or binding agent for chemicals. Fill material along with any contaminated soil etc. into sealable containers. Clean affected area with an aqueous detergent and a small amount of water. On completion of clean-up remove and wash all protective clothing and equipment with detergent and water. Any heavily contaminated clothing should be placed in a plastic garbage bag and placed in a sealable drum. Do not smoke, eat or drink during clean-up operation.

## 7. HANDLING AND STORAGE

### Handling

Wear appropriate protective equipments when handling the chemical substance. After handling and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water. Do not get into eyes or skin or on clothing. Do not breathe mist.

### Storage

Store the material in a cool and well-ventilated area. Keep out of reach of children and domestic animals. Do not store near to food, animal feed and drinks.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control Parameters/Occupational Exposure Limits

Singapore PEL - Not Available  
ACGIH TLV-TWA - Not Available

### Appropriate engineering control measure:

Local exhaust ventilation required. If there is a risk of overexposure, wear approved respirator.

### Personal Protective Equipment

When using the product, wear cotton overalls buttoned to the neck and wrist, a washable hat and elbow-length PVC gloves. If clothing becomes contaminated with product or wet with spray, remove clothing immediately. If product on skin, immediately wash area with soap and water. Wash hands after use. After each day's use, wash gloves and contaminated clothing. Do not contaminate water sources.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Form / Colour	:	Red to yellowish granules
Odour	:	Not Applicable
Density	:	0.8 - 0.9 g/cm <sup>3</sup>
Flammability	:	Non flammable
pH of 1% aqueous solution	:	4.00 - 7.00

## 10. STABILITY AND REACTIVITY

Stability	:	Stable under normal standard conditions.
Hazardous Polymerization	:	Will not occur
Conditions to Avoid	:	Incompatible material
Incompatibility with other materials	:	The product is incompatible with alkaline agents and acids.
Hazardous Decomposition Products	:	Carbon monoxide, carbon dioxide, nitrogen oxides, oxides of sulfur,

## 11. TOXICOLOGICAL INFORMATION

### For Active Ingredient

Acute oral LD <sub>50</sub> , rats	:	> 2000 mg/kg
Acute dermal LD <sub>50</sub> , rats	:	> 2000 mg/kg

## 12. ECOLOGICAL INFORMATION

### For Active Ingredient:

#### Toxicity to Birds

Bobwhite quail	: Acute oral LD <sub>50</sub>	: 30.2 mg/kg b.w.
Mallard duck	: LD <sub>50</sub>	: 48.4 mg/kg

#### Toxicity to Fish

Rainbow trout	: LC <sub>50</sub> (96 h)	: 0.115-0.2 mg/l
---------------	---------------------------	------------------

#### Toxicity to Bee

Toxic to bees. LD<sub>50</sub> (oral) < 0.1 µg/bee.

## 13. DISPOSAL CONSIDERATIONS

### Formulation Disposal

Do not contaminate water supply, food or feed by storage or disposal. Treatment, storage, transportation and disposal must be in accordance with local regulations. Do not flush to surface water or sanitary sewer system.

### Container Disposal

Empty and rinse at least 3 times before disposal. Do not discharge the rinsed water directly into any water course, drain or water source. Do not contain the used container with water for human and animal use, food or animal feed. The empty



container should be rendered unusable before disposal. Disposal of use container should be carried out by an approved chemical disposal company.

#### 14. TRANSPORT INFORMATION

UN number : 3077  
 Proper Shipping Name : Environmentally hazardous substance, solid, n.o.s.  
 Class : 9  
 Packing group : III

#### 15. REGULATORY INFORMATION

##### Applicable National Regulations:

Workplace Safety and Health Act & Workplace Safety and Health (General Provisions) Regulations: This product is subject to the SDS, labeling, PEL and other requirements in the Act/Regulations.

Maritime and Port Authority of Singapore (Dangerous Goods, Petroleum and Explosives) Regulations: This product is subject to the requirements of this Regulations.

Environmental Protection and Management Act and Environmental Protection and Management (Hazardous Substances) Regulations: This product is subject to the requirements of this regulations.

#### 16. OTHER INFORMATION

Date Created: 19 Jan 2015 Date Revised: 11 February 2016  
 Reason for Revision: Addition of information

The data given in this sheet is based on current knowledge and experience and is given in good faith but without guarantee or accuracy and no liability is accepted for any insufficient or inaccuracy in such data any case whatsoever.

The purpose of this Safety Data Sheet is to describe the product in terms of their safety requirement. The data does not signify any warranty with regards to the materials, properties or use.