



MATERIAL SAFETY DATA SHEET

PYMETROZINE 50% WG (Brand Name: Across X)

SECTION 1 :IDENTIFICATION OF THE SUBSTANCE / PREPARATION:

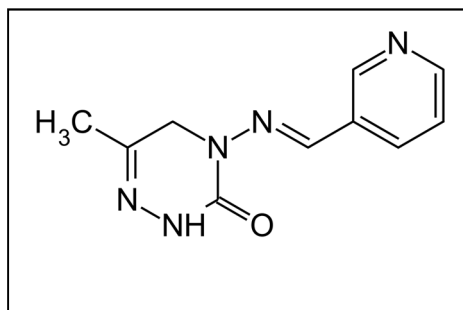
Date/ Issue: April 01, 2018

1.1. Product identifier/Name: Pymetrozine 50% WG (Brand Name: Across X)

1.2. Relevant identified use of substance or mixture and uses advised against

Chemical Name	6-methyl-4-[(E)-pyridin-3-ylmethylideneamino]-2,5-dihydro-1,2,4-triazin-3-one
Intended Use	Insecticide
Pesticide Family	Pyridine Azomethines
Empirical Formula	C ₁₀ H ₁₁ N ₅ O

Structural formula:



CAS NO.	: 123312-89-0
Molecular weight	: 217.23

1.3 Details of the supplier of the safety data sheets

Manufactured By	GSP Crop Science Private Limited Address: 551, GIDC Phase- II, Kathwada, Ahmedabad- 382430 Telephone: +91-79-61915222, 61915252 Email address : customercare@gspcrop.in Website: www.gspcrop.com
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1.4 Emergency Telephone number
Telephone : +91-79-22900451



SECTION 2 : HAZARDS IDENTIFICATION

2.1 Classification of the substance:

Classification (REGULATION (EC) No 1272/2008)

Carcinogenicity, Category 2 : H351: Suspected of causing cancer.

Chronic aquatic toxicity, Category 3 : H412: Harmful to aquatic life with long lasting effects.

2.2 Label Element.

Hazards symbols



Hazard statement

H351 Suspected of causing cancer.

H412 Harmful to aquatic life with long lasting effects.

Symptoms of Acute Exposure

May cause eye, skin and respiratory passage irritation. Allergic skin reactions are possible.

Hazardous Decomposition Products

Can decompose at high temperatures forming toxic gases

Physical Properties

Appearance: Beige to brown granules.

Odour: Weak.

Unusual Fire, Explosion and Reactivity Hazards

May form flammable dust-air mixture. This product is a combustible powder and like all Combustible powders can ignite, burn and form explosive mixtures with air if not Handled correctly. Mixtures of powder in air with flammable solvent vapors should be avoided. This product undergo a very strong exothermic decomposition reaction elevated Temperatures. During a fire, irritating and possibly toxic gases may be generated by thermal Decomposition or combustion.

Potential Health Effects

Relevant routes of exposure: Skin, eyes, mouth, lungs.



Precautionary statements

Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

P308 + P313 IF exposed or concerned: Get medical advice/ attention.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

2.3 Other hazards :

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

May form combustible dust concentrations in air.

SECTION 3 : Composition/Information on Ingredients.

3.1 COMPOSITION / INGREDIENTS

<u>Composition</u>	<u>% w/w</u>	<u>CAS no.</u>
Pymetrozine Technical a.i.	50.00 % w/w	123312-89-0
Other ingredients	q.s.	
Total	<u>100.00% w/w</u>	

SECTION 4 : First –Aid Measures

4.1 : Description of First –Aid Measures :

IF POISONING IS SUSPECTED, immediately contact the poison information centre, doctor or nearest hospital. Have the product container, label or Material Safety Data Sheet, a poison control center or doctor, or going for treatment. Tell the person contacted the complete product name, and the type and amount of exposure. Describe any symptoms and follow the advice given.

ON CONTACT WITH EYES: Flush eyes with clean water, holding eyelids apart for a minimum of 15 - 20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice. Obtain medical attention immediately if irritation persists.

ON SKIN CONTACT: Immediately remove contaminated clothing and wash skin, hair and fingernails thoroughly with soap and water. Flush skin with plenty of water for 15-20 minutes.



IF INHALATION: Move victim to fresh air. If not breathing, call an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible.

ON INGESTION: If swallowed, immediately contact a poison control centre, doctor or nearest hospital for treatment advice. Have person sip a glass of water if able to swallow. Do not give anything by mouth to an unconscious person. Do not induce vomiting unless directed by a physician or a poison control center. If spontaneous vomiting occurs, have victim lean forward with head down to avoid breathing in of vomitus, rinse mouth and administer water.

4.2 : Most Important symptoms and effects, both acute and delayed :

Symptoms: None specific

No symptoms known or expected.

4.3 : Indication of any immediate medical attention and special treatment needed.

Treatment: There is no specific antidote available

Treat symptomatically.

SECTION 5 : FIRE-FIGHTING MEASURES

5.1 Extinguishing media.

Suitable extinguishing media: small fires;

Use water spray. Alcohol-resistant foam, dry chemical or carbon Dioxide.

Large Fires.

Alcohol resistant foam or water spray.

Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2 special hazards arising from the substance or mixture :

Specific hazards during fire fighting : As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion. Exposure to decomposition products may be a hazard to health.

5.3 Advice for fire fighters:

Special protective equipment for firefighters : Wear full protective clothing and self contained breathing apparatus.

Further information : Do not allow runoff from fire fighting to enter drains or water courses.

Cool closed containers exposed to fire with water spray.

SECTION : 6 ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, protective equipment and emergency procedures : Make sure all personnel involved in the spill cleanup follow good industrial hygiene practices. A small spill can be handled routinely. Use adequate ventilation and wear equipment and clothing as described in Section 8 and/or the product label.

6.2 Environmental Precautions : Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.



6.3 Method and material for containment and cleaning up :

Control the spill at its source. Contain the spill to prevent from spreading or contaminating soil or from entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Sections 7 and 8. Scoop or sweep up material and place into a disposal container. Wash area with detergent and water. Pick up wash liquid with additional absorbent and place into compatible disposal container. On soils, small amounts will naturally decompose. For large amounts, skim off the upper contaminated layer and collect for disposal. Once all material is cleaned up and placed in a disposal container, seal container and arrange for disposal. Spillages or uncontrolled discharges into watercourses must be reported to the appropriate regulatory authority

6.4 Reference to other Sections :

Refer to disposal considerations listed in section 13.

Refer to protective measures listed in section 7 and 8.

SECTION 7 : HANDLING AND STORAGE

7.1 Precautions for safe handling : KEEP OUT OF REACH OF CHILDREN. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Avoid breathing vapours or spray mist. Wear full protective clothing and equipment (see Section 8). After work, rinse gloves and remove protective equipment, and wash hands thoroughly with soap and water after handling, and before eating, tobacco use, drinking, applying cosmetics or using the toilet. Wash contaminated clothing before re-use and separate from household laundry. Keep containers closed when not in use. Protect product, wash or rinse water, and contaminated materials from uncontrolled release into the environment, or from access by animals, birds or unauthorized people.

7.2 Condition for safe storage, including any incompatibilities: Store in original container only in a well-ventilated, cool, dry, secure area. Protect from heat, sparks and flame. Do not expose containers to temperatures above 40 °C. Keep separate from other products to prevent cross contamination. Rotate stock. Clean up spilled material immediately. National Fire Code classification: Not applicable.

7.3 Specific and Use(s)

Specific use(s) For proper and safe use of this product, please refer to the approval condition laid down on the product label.

SECTION 8 :EXPOSURE CONTROLS/ PERSONAL PROTECTION.

8.1 Control Parameters

Occupational exposure limits :

Components	CAS No.	Exposure limit	Type of exposure limit	Source
Pymetrozine	123312-89-0	0.8 mg/m ³	TWA	GSP
Silica	61790-53-2	4 mg/m ³	TWA	WES



Engineering measures : This product is intended for use outdoors where engineering controls are not necessary. If necessary, ensure work areas have ventilation, containment, and procedures sufficient to maintain airborne levels below the TLV. Warehouses, production area, parking lots and waste holding facilities must have adequate containment to prevent environmental contamination. Provide separate shower and eating facilities.

8.2 EXPOSURE CONTROLS

PERSONAL PROTECTIVE EQUIPMENTS

Personal protective equipment for each exposure route: General: Avoid breathing dust, vapours or aerosols. Avoid contact with eye, skin and clothing. Wash thoroughly after handling and before eating, drinking, applying cosmetics or using tobacco.

INGESTION: Do not eat, drink, handle tobacco, or apply cosmetics in areas where there is a potential for exposure to this material. Always wash thoroughly after handling.

EYES PROTECTION: Where eye contact is likely, use chemical splash goggles. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

SKIN AND BODY PROTECTION: Where contact is likely, wear chemical-resistant (such as nitrile or butyl) gloves, coveralls, socks and chemical-resistant footwear. For overhead exposure, wear chemical-resistant headgear.

INHALATION: A respirator is not normally required when handling this substance. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. A NIOSH certified combination air-purifying respirator with an N, P or R 95 or HE class filter and an organic vapour cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air-purifying respirators is limited. Use a pressure demand atmosphere-supplying respirator if there is any potential for uncontrolled release, exposure levels are not known, or under any other circumstances where air-purifying respirators may not provide adequate protection.

SECTION 9 : PHYSICAL & CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance: Beige to brown granules.

Formulation Type: Water dispersible granule

Odour: Weak.

pH: 7 - 11 (1% aqueous solution @ 25 °C).

Vapour pressure and reference temperature: 7.3×10^{-10} mmHg @ 20 °C
(Pymetrozine Technical).

Vapour density: Not applicable.

Boiling point: Not applicable.



Melting point: Not applicable.

Freezing point: Not applicable.

Specific gravity or density: 0.4-0.6 g/cm³ @ 25 °C.

Evaporation Rate: Not applicable

Water/oil partition coefficient: Log Pow = -0.19 @ 25 °C (Pymetrozine Technical).

Odour threshold: Not applicable

Viscosity: Not applicable.

Solubility in Water: 270 mg/L @ 20 °C (Pymetrozin Technical).

SECTION 10 : STABILITY AND REACTIVITY

10.1 Reactivity : None reasonably foreseeable

10.2 Chemical stability: Stable under normal use and storage conditions.

10.3 possibility of hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid :No decomposition if used as directed.

10.5 Incompatible materials : none known

10.6Hazardous decomposition products: No Hazardous decomposition products are known.

SECTION 11 : TOXICOLOGICAL INFORMATION

11.1 information on toxicological effects :

Acute Toxicity

LD₅₀ Acute Oral > 5000 mg/kg Body Weight

LD₅₀ Acute Dermal > 5000 mg /kg Body Weight

LC₅₀ Acute Inhalation > 3.09 mg/L air - 4 hours

Eye Irritation Minimally Irritating (Rabbit)

Skin Irritation Slightly Irritating (Rabbit).

Dermal sensitization Potential Dermal Sensitizer (Guinea Pig)

Reproductive/Developmental Effects

Reproductive: Developmentally toxic (pup weight gain reduction) at high doses.

Teratogenic: Negative; developmental effects (skeletal abnormalities) seen only at maternally toxic doses.



Chronic/Subchronic Toxicity Studies

Liver, spleen, thymus, kidney, muscle, digestive tract, thyroids, and blood effects at high doses.

Carcinogenicity

Increased liver tumors in mice and rats at high doses. Mutagenic potential: None observed.

Other Toxicity Information: None

SECTION 12 : ECOLOGICAL INFORMATION

12.1 Toxicity

<i>Ecotoxicity Effects-aquatic Product</i>	
Acute toxicity to fish:	LC ₅₀ (96 h) = >100 mg/L (<i>Onchorhynchus mykiss</i> [rainbow trout])
Toxicity to daphnia and other aquatic invertebrates:	EC ₅₀ (48h) = >100 mg/L (<i>Daphnia magna</i> (water flea))
Toxicity to algae:	EC ₅₀ (96 h) = >100 mg/L (<i>Pseudokirchneriella subcapitata</i> [green algae])
<i>Ecotoxicity Effects – terrestrial (active ingredient unless otherwise specified)</i>	
Toxicity to Birds:	LD ₅₀ = 2000 mg/kg (mallard duck and bobwhite quail)
Toxicity to soil dwelling organisms:	Similar product: LC ₅₀ (14 days) = 1098 mg/kg (earthworms)
Toxicity to Bees:	Similar product: LD ₅₀ (48 h oral) = >200 µg/bee
	Similar product: LD ₅₀ (48 h contact) = >200 µg/bee

12.2 Persistence and

degradability:

Biodegradability: Not readily biodegradable

Stability in water: Degradation half-life: 4.8 – 6.3 d
Not persistent in water.

12.3 Bioaccumulative potential:

Bioaccumulation: Low bioaccumulation potential

Partition coefficient: n-octanol/water: Log Pow: -0.18 (25°C)

12.4

Mobility in soil:

Distribution among environmental compartments: Slightly mobile in soils.

Stability in soil: Dissipation time: 7.9 – 30 d
Percentage dissipation: 50% (DT₅₀)
Not persistent in soil.

12.5

Other adverse effects:

Results of PBT and vPvB assessment (product): This substance contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.



SECTION 13 : DISPOSAL CONSIDERATIONS

13.1 **WASTE TREATMENT METHOD** : Do not reuse empty containers unless they are specifically designed to be re-filled. Empty container retains product residue. Dispose of empty containers in accordance with local regulations. Consult provincial environment ministry for advice on waste disposal. Industrial/commercial waste may be handled at licensed facilities only. Waste shipments must be securely packaged and properly labelled. Only licensed carriers may be used, and proper documents must accompany the shipment.

SECTION 14: TRANSPORT INFORMATION

Shipping information such as shipping classification:

TRANSPORTATION OF DANGEROUS GOODS CLASSIFICATION - ROAD/RAIL. Not Regulated.

Rail / Road (NYS 5433)	Not classified as dangerous good
Sea (IMDG-Code)	Not classified as dangerous good
	MARINE POLLUTANT: No
Air (IATA)	Not classified as dangerous good

SECTION 15 : REGULATORY INFORMATION

WHMIS classification for product: Exempt

A statement that the MSDS has been prepared to meet WHMIS requirements, except for use of the 16 headings. This MSDS has been prepared in accordance with WHMIS requirements, but the data are presented under 16 headings.

Other regulations; restrictions and prohibitions.

SECTION 16 : OTHER INFORMATION

For proper and safe use of this product, please refer to the approval conditions laid down on the product label.

The information contained in this safety data sheet is given in good faith. It is accurate to our best of knowledge and belief and represents the most up to date information. The information given in this data sheet does not constitute or replace the users own assessment of work place risk as required by other health and safety legislation. GSP Crop Science Private Ltd. will not be liable for any claims or damages arising out of use of this information.