MATERIAL SAFETY DATA SHEET

PRODUCT : Dinotefuran 15 + Pymetrozine 45% WG

PRODUCT DESIGNATION: Insecticide

Section 1. Product & Company Identification

Common Name : Dinotefuran, Pymetrozine

Grade : Formulation

Active Ingredient : Dinotefuran, Pymetrozine

Chemical Name of Active: **Dinotefuran:**(EZ)-(RS)-1-methyl-2-nitro-3-

Ingredient (IUPAC) (tetrahydro-3-furylmethyl)guanidine

Pymetrozine:4,5-2H-6-methyl-4(3-pyridine-methano-

amino)-1,2,4-triadiazin-3-3(2H)-one

Chemical Family of A. I. : Insecticide

Molecular Formula of A. I. : **Dinotefuran:** C₇H₁₄N₄O₃

Pymetrozine: C₁₀H₁₁N₅O

Molecular Mass of A. I. : **Dinotefuran:** 202.2 g/mol

Pymetrozine: 217.2 g/mol

Manufacturer & Supplier : M/s PERFECT SOLUTIONS

Office Add: B-371, Paschim Vihar, New Delhi -

110063 (India)

Factory Add: 15/1, 15/2, 15/3 Industrial Estate,

Vidisha - 464001 (M.P)

Telephone Number : +91 8375844625

Section 2. Composition / Information on Ingredients

 Dinotefuran
 15.00 % w/w

 Pymetrozine
 45.00 % w/w

 Other components
 60.00 % w/w

 Total
 100.00% w/w

Section 3. Hazards Identification

Symptoms of Poisoning: Nausea, diarrheal, dripping nose and mouth,

excessive salivation, stomach cramps, excessive

sweating, trembling, loss of muscle coordination,

muscular twitches, weakness, mental confusion, and

blurred vision, breathing difficulties, rapid pulse and

pin-point pupils

Skin: Avoid contact with skin

Inhalation: Harmful by inhalation.

Ingestion: Warning! Keep out of reach of children. Toxic if

swallowed and by inhalation.

Environmental effects: N/A

Section 4. First Aid Measures

Eyes:

Immediately rinse eyes with a large amount of running water for 15-20 minutes. Remove contact lenses, if present, after 5 minutes, then continue rinsing eye. Hold eyelids apart to rinse the entire surface of the eyes and lids. Do not apply any medicating agents except on the advice of a physician.

Skin:

Remove contaminated clothing. Wash skin immediately with plenty of soap and water, including hair and under fingernails. Do not apply any medicating agents except on the advice of a physician. Obtain medical attention if irritation persists. Decontaminate clothing prior to re-use.

Inhalation:

Move victim from the contaminated area to fresh air. If the individual is not breathing, call an ambulance and begin artificial respiration.

Ingestion:

If victim is fully conscious, give a large quantity of water to drink. Do not induce vomiting unless under the direction of a physician. Never give anything by mouth to an unconscious or convulsing person.

Section 5. Fire Fighting Measures

Extinguishing media:

Use dry chemical, foam, or CO2 extinguishing media. 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.

Section 6. Accidental Release Measures

Procedures for dealing with release or spill:

Control the spill at its source. Contain the spill to prevent it from spreading, contaminating soil, or entering sewage and drainage systems or any body of water. Clean up spills immediately, observing precautions outlined in Section 8. Moisten the spilled material with a little water. For small spills, sweep up as much material as possible, keeping dust to a minimum and place in a marked chemical container. Wash the spill area with water containing a strong detergent (e.g. commercial products such as Tide, Joy Spic and Span), absorb with pet litter or other absorbent material, sweep up and place in a chemical container. Seal container and label appropriately for disposal. Flush the spill area with water to remove any residue. Do not allow wash water to contaminate water supplies. Heavily contaminated soil layers have to be dug out down to clean soil.

Section 7. Handling & Storage

Precautions in Handling:

Keep out of reach of children. Do not eat, drink, use tobacco or apply cosmetics in areas where there is a potential for exposure to the material. Always wash thoroughly after handling. Also see section 8 below.

Storage:

Store the material in a well-ventilated, secure area out of the reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area.

Section 8. Exposure Control, Personal Protection

Inhalation:

Work in a well -ventilated area. A air-purifying respirator with a filter and an organic vapor cartridge may be permissible under 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.

Eyes:

To avoid eye contact, wear safety glasses with side shields or chemical goggles.

Skin:

To avoid skin contact, wear rubber gloves, rubber boots, long-sleeved shirt, long pants and a head covering.

Ingestion:

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

Section 9. Physical and Chemical Properties

Appearance / state : White to off-white granules

Colour : White to off-white

Odour : Characterstic odour

Melting point : 217°C

Vapour pressure : 7.3 x 10-16 mmHg @ 20°C

Ph : 7-11 (1% aq. Soln)

Density : 0.40 g/cm3 @ 25°C

Water Solubility : 0.29 g/l

Section 10. Stability & Reactivity

Chemical stability: Stable under normal use and storage conditions.

Hazardous decomposition products: Can decompose at high temperatures forming toxic

gases.

Hazardous polymerisation: Will not occur.

Section 11. Toxicological Information

Acute Oral Toxicity- LD₅₀ Rat: >5000 mg/kg

Acute Dermal Toxicity- LD₅₀ Rat: > 2,000 mg/kg body weight

Acute Inhalation - LD50 Rat: >1500 mg/m³ air

Eye irritation Non Irritating to eyes

Skin Irritation Non irritating

Skin Sensitization Not a skin sensitizer

Section 12. Ecological Information

Toxicity to Fishes Rainbow Trout LC50/EC50 >100mg/l

Toxicity to daphnia LC₅₀ (48h) 87mg/l

Toxicity to Bees LD50 (48h)117 μg/bee

Toxicity to Birds Bobwhite quail LD₅₀ >2000 ppm

Section 13. Disposal Consideration

Pesticide disposal:

Pesticide wastes may be toxic. Improper disposal of unused pesticide is a violation of Federal law. If these wastes cannot be used according to label instruction, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance in proper disposal methods.

Container Handling:

Non-refillable container.

Do not reuse or refill this container. Completely empty bag into application equipment. Then offer for recycling if available or dispose of empty bag in a sanitary landfill, by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

Section 14. Transport Information

IMDG Classification

Shipping name : ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

SOLID, N.O.S. (PYMETROZINE)

Class : 4.1

Packing group : III

UN number : 3077

Section 15. Regulatory Information

Safety phrases:

S2 Keep out of the reach of children.

S3 Keep in a cool place.

S13 Keep away from food, drink and animal feeding stuffs.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection

Section 16. Other Information

All information and instructions provided in this Material Safety Data Sheet (MSDS) are based on the current state of scientific and technical knowledge at the date indicated on the present MSDS and are resented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear. It is the responsibility of persons on receipt of this MSDS to ensure that the information contained herein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. If the recipient subsequently produces formulations containing this product, it is the recipient's sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS. Accordingly, no guarantee or warrantee expressed or implied is made by PERFECT SOLUTIONS, as to the results to be obtained based upon the user's use of the information, nor does PERFECT SOLUTIONS, assume any liability arising out of user's use of the information.

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