MATERIAL SAFETY DATA SHEET

PRODUCT : Acetamiprid 1.1% + Cypermethrin 5.5% EC

Section 1. Product & Company Identification

Common Name : Acetamiprid 1.1% + Cypermethrin 5.5% EC

Active Ingredient : Cypermethrin + Acetamiprid

Chemical Name of Active: Acetamiprid - (E)-N1-[(6-chloro-3-pyridyl)methyl]-

Ingredient (IUPAC) N2-cyano-N1-methyl acetamidine

Cypermethrin: 3-(2,2-dichloroethenyl)-2,2-dimethyl-

cyclopropanecarboxylicacid, cyano (3-

phenoxyphenyl)methyl ester

Chemical Family of A. I. : **Acetamiprid -** Neonicotinoid

Cypermethrin: synthetic pyrethroid

CAS NO. : **Acetamiprid** – 135410-20-7

Cypermethrin- 52315-07-8

Molecular Formula of A. I. : **Acetamiprid** - C₁₀H₁₁CIN₄

Cypermethrin: C₂₂H₁₉O₃NCl₂

Molecular Mass of A. I. : **Acetamiprid -** 222.7 g/mol

Cypermethrin: 416.30g/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

Identity % W/W content

Cypermethrin, a.i. 5.5% w/w
Acetamiprid a.i 1.1% w/w

Other additives Q. S to make to 100.00%

Section 3. Hazards Identification

Appearance and odour: Pale yellow to off - white crystal, mild mercaptan type odour

Warning Statements: Keep out of reach of children

Potential Health Effects Likely Routs of Exposure: Skin contact, Inhalation and Ingestion.

Eye Contact: May cause slight irritation and redness to eye

Skin contact: Not irritating to skin but irritation may occur on prolonged contact

Ingestion: If swallowed, this substance is considered to be toxic and likely to cause damages

to internal organs.

Section 4. First Aid Measures

Emergency and First Aid Procedure -

If in Eyes: Immediately flush with plenty of clean water for 15-20 minutes. Remove contact lenses if present after 5 minutes of washing. Get medical attention.

If on Skin: Take off contaminated clothing, rinse skin immediately with plenty of water for 15-20 minutes. Get medical attention.

If Inhaled: Remove person to fresh air, if required give artificial respiration. Get medical attention.

If Swallowed: Induce vomiting (ONLY for CONSCIOUS PERSON); Unconscious person must be transferred to Physician/hospital for immediate medical attention.

Note to Physician: Diagnosis can be confirmed estimating cholinesterase activity of blood plasma.

Antidote: Administer Atropine Sulfate intravenously in dose of 2-4 mg for an Adult. Administer 2 PAM 1000-2000 mg IM or IV for adult or 15 mg/Kg body weight for children.

Section 5. Fire Fighting Measures

Hazardous product of Combustion: On decomposition it may give Hydrochloric acid, Ethyl sulphide, Diethyl sulphide and Nitrogen oxides.

Extinguishing Media: Foam, Dry chemical powder, CO₂ type fire extinguisher or Flood with water.

Unusual Fire and Explosion Hazards: Exothermic decomposition above 160°C. Violent rupture of containers due to over pressurisation may occur.

Section 6. Accidental Release Measures

Personal Protection: Observe all protection and safety precautions. Depending on the magnitude of the spill, use of eye protection, gloves and boots when cleaning up spills are recommended. For PPE see Section 8

Steps to be taken in case of a spill: It is recommended to have a predetermined plan / SOP for the handling of spills.

Stop the source of the spill immediately, if safe to do so. Contain the spill to prevent any further contamination of soil or water.

Keep all bystanders away. Wear full-length clothing and appropriate gloves. Shovel and collect the spilled material / contaminated absorbent and place in suitable containers. Thoroughly scrub the floor or other impervious surfaces with a strong industrial detergent and rinse with water.

Spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be collected and removed for treatment or disposal through incineration.

Section 7. Handling & Storage

Precautions in Handling: In an industrial environment, such as while making formulation, filling or packing, it is recommended to avoid physical contact with the product and to have adequate ventilation.

Avoid spillage into the eyes, or contact with bare skin or clothing. Avoid inhaling vapours, mist. Wash hands, feet, face thoroughly after handling. Remove contaminated clothing immediately

Precautions in Storage: The product is stable under normal conditions of warehouse storage. Keep container lids tightly closed. Store below 45°C.

Store in a cool, dry, well- ventilated place away from foodstuffs, animal feed under lock & key.

Specific Use: The product is meant / approved to be used as insecticide.

Section 8. Exposure Control, Personal Protection

Exposure Limit Values: TLV (ACGIH): 0.2 mg/m³ (skin

 $STEL: 0.6 \text{ mg/m}^3$

Appearance / state

Personal Protection: When used in a closed / automated system, personal protection equipment may not be required. When closed system is not possible in case of maintenance, repair, sampling etc, systems must be made nonhazardous before opening.

Respiratory Protection: The product is likely to pose inhalation exposure concern during normal handling. In the event of an accidental discharge of the material during manufacture or handling which produces a vapours or mist, workers should put on respiratory protection equipment with a universal filter.

Protective Gloves: Wear heavy duty appropriate gloves

Eye Protection: Wear goggles, face shield or safety glasses. It is recommended to have an eye wash fountain available in the work area.

Skin Protection: Wear appropriate protective clothing to prevent direct skin contact

Liquid

Section 9. Physical and Chemical Properties

Color	:	Brown liquid
Odor	:	Aromatic odor

Melting point Not Applicable

Specific gravity 0.94 at 20°C

pН 6 - 7.5

Corrosivity Corrosive

Viscosity The product free flowing liquid

155-180 °C Boiling point $> 24.5^{\circ}$ C

Flash Point

Section 10. Stability & Reactivity

Chemical Stability: Product is stable under ambient conditions of storage

Materials to Avoid: Avoid contact with alkaline materials. Hazardous Decomposition Product: Refer to section no. 5

Hazardous Polymerisation: Not known.

Section 11. Toxicological Information

Health Hazards: Refer to section no. 3

Acute Toxicity: The product is toxic. It should be treated with the usual care of handling

hazardous chemicals.

Route(s) of Entry

Ingestion: LD₅₀, oral, rat: 321 mg/kg body weight

Skin: LD₅₀, dermal, rat: > 2000 mg/kg body weight

Inhalation: 4 hour LC₅₀, rat: is 5.02 mg/L air

Dermal Irritation- Slight-irritant

Eye Irritation- Slight irritant

Skin Sensitization- Weak- sensitizer

Section 12. Ecological Information

Birds - Bobwhite Quail LC50 = >20,000 ppm Mallard Duck LD50 Oral = >4640 mg/kg

The Aquatic Organisms- Daphnia Magna LD50 = >0.0002 mg/lit

Blue-Green Algac (Nostoc linckia)LC50 (20H)=20,000

Fishes Bluegill Sunfish LD50 (96H) = 0.0018 mg/lit Rainbow Trout LD50 (96H) = 0.0082 mg/lit

Section 13. Disposal Consideration

Waste Treatment Methods: Keep out of drains, sewers, ditches and waterways.

Left-over material that should not be used or chemically reprocessed and should be disposed of in a landfill approved for pesticide disposal. Other possible methods of disposal are controlled incineration with flue gas scrubbing.

Containers: Emptied containers may retain vapour and product residue. Observe all labeled safeguards until container is cleaned or destroyed.

Triple or pressure rinse empty containers. Pour rinse water into formulation tank. Store for collection by approved waste disposal service.

Dispose of as non hazardous industrial waste. Do not re-use containers.

Disposal of waste and packaging materials must always be in accordance with all applicable local laws / regulations.

Section 14. Transport Information

IMDG Classification

Shipping name : Pyrethroid pesticide, liquid, toxic, flammable

Class : 6.1

Label : 6

Packing group : III

UN number : 6219

Marine Pollutant : Yes

Section 15. Regulatory Information

Contains: Chlorpyrifos

Regulatory Status: The product is meant for the production of insecticide formulations which may only be used for the applications they are registered for, in accordance with an officially approved label.

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.

Safety Division : PERFECT SOLUTIONS, SAFETY DIVISION