Thiacloprid -MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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1. Chemical Product Identification

Product Name: Thiacloprid

Molecular Formula: C₁₀H₉CIN₄S

Molecular Weight: 252.72

Structural Formula:

Chemical Name: (Z)-3-(6-chloro-3-pyridylmethyl)-1,3-thiazolidin-2- ylidenecyanamide

Form: Powder Color: Off-white

Odor: Slight special odor CAS No.: 111988-49-9

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Thiacloprid	111988-49-9	24
Others ingredients		76

3. Hazards Identification

Component	Symbol	R phrases
Thiacloprid	Xn	R20/22-40-52/53

Harmful if swallowed.

Limited evidence of a carcinogenic effect.

Irritation to eyes and skin.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. First Aid Measures

Skin: Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attemtion.

Eyes: Rinse with plenty of water for several minutes (remove contact lenses if easily possible) and seek medical advice.

Inhalation: Move affect person to fresh air and keep at rest until recovered. If symptoms persist, call a physician.

Ingestion: Do not induce vomiting if the person is conscious. Give glass of water. Get to a dortor.

5. Fire-Fighting Measures

Extinguishing media

To be used: water spry, carbon dioxide, foam, sand and dry powder.

Don't use: not applicable

Particular risk: none.

Measures of personal protection: safety glasses or goggles, rubber gloves, shoes plus socks, long-sleeved shirt, and long pants.

Environmental cautions

EX: Contain the spread of the fire-fighting media. Do not allow run-off from fire fighting to enter drains or water courses.

6. Accidental Release Measures

Personal cautions: Avoid contact with spilled product or contaminated sufaces. Wear personal protective equipment. Unprotected persons must be kept away.

Cleaning methods

EX: Take up with absorbent material, clean contaminated floors and objects thoroughly, observing environmental regulations. Keep in suitable, closed containers for disposal.

Environmental cautions

EX: Do not discharge into the drains/surfacewater/groundwater. If spillage enters drains leading to sewage works inform local water company immediately. If spillage enters rivers or watercourses, inform the Environment Agency.

7. Handling and Storage

Handling: Handle and open container in a manner as to prevent spillage. Maintain exposure levels below the exposure limit through the use of general and local exhaust ventilation. Handle in accordance with good industrial hygiene and safety practice. Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toliet or applying cosmetics.

Storage: Store in a cool, dry place and in such a manner as to prevent cross contamination with other pesticides, fertilizers, food, and feed. Store in original container and out of the reach of children, preferable in a locked storage area..

8. Exposure Controls/personal protection

PEL: not applicable

Personal protective equipment: full-length overalls

Respiratory protection: approved respirator.

Protective gloves: rubber gloves

Eye protection: safety goggles or face shield.

Industrial hygiene: ventilation

9. Physical and Chemical Properties

Appearance: Off white flowable ropy liquid

Suspensibility: Qualified

Density: 1.04g/cm³ at 20 °C

Flash point: Not highly flammable;

10. Stability and Reactivity

Conditions to avoid: avoid extremes of temperature and direct sunlight;

Products to avoid: none;

Hazardous decomposition products: hydrogen chloride, hydrogen cyanide, carbon

monoxide, sulphur dioxide, nitrous gases.

Hazardous reaction: none;

11. Toxicological Information

Acute toxic

Oral LD₅₀ for rats 444mg a.i./kg

Dermal LD₅₀ for rats >2000mga.i./kg

Skin irritation: irritating to skin (rabbits)

Eye irritation: Irritating to eyes (rabbits)

Skin sensitization: Non-sensitizing to skin (guinea pig).

12. Ecological and Ecotoxicological Information

Fish: LC_{50} (96h) for bluegill sunfish is 25.2mg a.i./l, LC_{50} (96h) for oncorhynchusmykiss is

30.2 mg a.i./kg.

Bird: LD₅₀ for contunix japonica is 49 mg a.i./kg.

Other beneficial spp.: Acute 48 hour LD₅₀: 17.32µg a.i./bee.

13. Disposal Considerations

Follow container label instructions for disposal of wasters generated during use in compliance with the product label. Follow advice on product label and/or leaflet. Triple rinse containers. Do not re-use empty containers. Puncture container to avoid re- use. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration, or if allowed by state or local authorities, by burning. If burned, stay out of smoke.

14. Transport Information

Not applicable.

15. Regulatory Information

Not applicable.

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 presented 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 produce formulations containing this

product, it is the recipients sole responsibility to ensure the transfer of all relevant information from this MSDS to their own MSDS.