



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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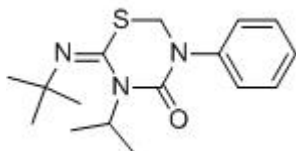
1. Chemical Product Identification

Product Name: Buprofezin 25% WP

Molecular Formula: C₁₆H₂₃N₃OS

Molecular Weight: 305.44 g/mol

Structural Formula:



Chemical Name: (Z)-2-tert-butylimino-3-isopropyl-5-phenyl-1,3,5-thiadiazinan-4-one

Form: Powder

Color: Gray to pale yellow

Odor: Odorless

CAS No.: 69327-76-0

2. Composition / Information On Ingredients

Composition	CAS No.	Content %
Buprofezin	69327-76-0	25.0
Other ingredients		75.0

3. Hazards Identification



More important danger for the man: It is not inhibition of acetylcholinesterase, but it is Chitin Synthesis Inhibitors.

Dangers for the environment: Because the chemical itself is very specific to the certain insects, it is very safe to the natural enemies and the other beneficial insects.

Physical-chemical dangers: none

4. First Aid Measures

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

Eyes: First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.]

Inhalation: Fresh air, rest. Refer for medical attention.

Ingestion: contact a Doctor or Poisons Information Centre.

Antidote: not applicable

5. Fire-Fighting Measures

Extinguishing media

To be used: Powder, water spray, foam, carbon dioxide.

Don't use: not applicable

Particular risk: not applicable

Measures of personal protection: Workers involved in transport, storage and retailing should be protected by safe work practices and training. End users should follow the instructions on the product label. Elbow-length PVC gloves and cotton overalls are recommended for users of Applaud Insecticide.

6. Accidental Release Measures

Personal cautions: Workers involved in transport, storage and retailing should be protected by safe work practices and training. End users should follow the instructions on the product label. Elbow-length PVC gloves and cotton overalls are recommended for users of Applaud Insecticide.

Cleaning methods

EX: clear the material in time. Transfer to a properly labeled deposit that will be closed and sealed until the recovery of elimination of the product.



Environmental cautions

EX: prevent the contamination of the floor and of beds of water.

7. Handling And Storage

Handling: It should be under no circumstances what soever be handled by children or incompetent persons. While in storage, drum should be kept well sealed and stored in cool, dry and well ventilated place. In case of accidental ingestion, the patient should be taken to a doctor who should give symptomatic treatment.

Storage: Store in the closed, original container in a cool well-ventilated area. Do not store for prolonged periods in direct sunlight.

Technical protective measures:

Fire and explosion protection: The active ingredient is non-explosive. Intact containers exposed to excessive heat should be cooled with water to reduce drum pressure. If possible, use a foam blanket to contain spill. Avoid using AFFF. Contain runoff. Breathing apparatus will be required.

8. Exposure Controls / Personal Protection

TWA: not applicable

Personal protective equipment

Respiratory protection: approved respirator

Protective gloves: elbow-length PVC gloves.

Eye protection: goggles

Industrial hygiene: use good industrial hygiene. Wear face shield or goggles, elbow length PVC gloves, cotton overalls buttoned to the neck and wrist, washable hat and half face respirator with dust and vapor cartridge. After use and before eating, drinking or smoking, wash hands, arms and face thoroughly with soap and water.

9. Physical And Chemical Properties

Form: Powder

Color: Gray to pale yellow

Odor: Odorless

Suspensibility: $\geq 75.0\%$

Fineness (through 325mesh sieve): $\geq 98\%$



Wetting time: ≤ 90 s

pH: 6.0-10.5

Moisture: $\leq 2.0\%$

10. Stability And Reactivity

Conditions to avoid: fire and high temperature.

Products to avoid: highly alkaline materials.

Thermal decomposition:

Hazardous decomposition products: not applicable.

Hazardous reaction: none.

11. Toxicological Information

Acute oral LD₅₀ for rats is >2198 a.i.mg/kg.

Acute percutaneous LD₅₀ for rabbits is >2000 a.i.mg/kg.

Acute inhalation toxicity LC₅₀ (4 h) for rats is >4.57 a.i.mg/l.

Skin irritation: Non-irritating to skin (rabbits).

Eye irritation: Non-irritating to eyes (rabbits).

Skin sensitization for guinea pig: Not a skin sensitiser.

12. Ecological And Ecotoxicological Information

Effect on birds: Acute oral LD₅₀ for Mallard is >2000 a.i.mg/kg.

Effect on fish: Acute LC₅₀ (96 h) for Rainbow trout is >0.33 a.i.mg/l.

Effects on aquatic invertebrates: Acute EC₅₀ (48 h) for Daphnia magna is >0.42 a.i.mg/l.

Effects on algae: Acute EC₅₀ (72 h) for Pseudokirchneriella subcapitata is >2.1 a.i.mg/l.

Effects on bees: Contact acute (48 h) LD₅₀ is >200 a.i.µg/bee, Oral acute (48 h) LD₅₀ is >163.5 a.i.µg/bee.

Effects on earthworms: Acute 14 day LC₅₀ is >500 a.i.mg/kg.

13. Disposal Considerations

Disposal: Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush, or puncture and bury empty containers in a local authority landfill. If no landfill is available,



bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Empty containers and product should not be burnt.

Spillage disposal: Wear protective equipment (see Safety Directions). Apply absorbent material such as earth, sand, clay granules or cat litter to the spill. When absorption is completed, sweep up material and contain in a refuse vessel for disposal (see Storage and Disposal Section). If necessary wash the spill area with an alkali detergent and water and absorb the wash liquid for disposal as described above.

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.