



MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

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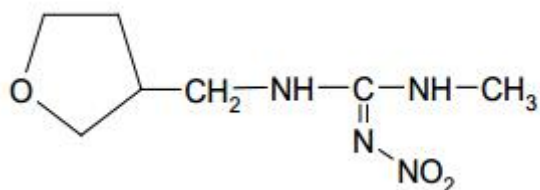
1. Chemical Product Identification

Common name: Dinotefuran 95% TC

Empirical formula: C₇H₁₄N₄O₃

Molecular weight: 202.21 g/mol

Structural formula:



Chemical name: 2-methyl-1-nitro-3-[(tetrahydro-3-furanyl) methyl] guanidine

Form: Powder

Colour: White

2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Dinotefuran	165252-70-0	95
Others		5

3. Hazards Identification

For large exposures or fire, wear personal protective equipment.

Dangers for the environment: Highly toxic to algae and toxic to fish and aquatic organisms.



Keep out of drains and water courses.

4. First Aid Measures

Skin: wash affected area with soap and water. If irritation persists, see a physician.

Eyes: flush with plenty of water for 15 minutes. Call a physician immediately.

Inhalation: remove victim to fresh air. If not breathing, give artificial respiration, preferable mouth to mouth. Get medical attention.

Ingestion: call a physician or the poison control center immediately. Drink one or two glasses of water and induce vomiting by touching the back of the throat with finger. Repeat until vomit fluid is clear. Do not induce vomiting or give anything by mouth to an unconscious person.

5. Fire-Fighting Measures

Extinguishing Media: Foam, CO₂ or dry chemical.

Fire/Explosion Hazards: slightly combustible. This material may support combustion at elevated temperatures.

Fire Fighting procedures: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

Hazardous decomposition Products: Carbon monoxide, nitrogen oxides.

6. Accidental Release Measures

Consult an expert! Collect leaking and spilled liquid in sealed containers as far as possible.

Absorb remaining liquid in sand or inert absorbent and remove to safe place. Sweep spilled substance into dry, sealed containers. Carefully collect remainder, then remove to safe place (extra personal protection: P3 filter respirator for toxic particles).

7. Handling And Storage

Handling and Storage: do not contaminate water, food or feed by storage or disposal. Keep container closed when not in use. Store in cool, dry location. Do not store in direct, hot sunlight. Do not contaminate water, food or feed by storage, disposal or by cleaning of equipment. Do not reuse empty bag. Open dumping is prohibited.

Technical protective measures: may be fatal if swallowed. Harmful if absorbed through the skin. Causes eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with



soap and water after handling and before eating, drinking or using tobacco.

Fire and explosion protection: wear protective clothing.

8. Exposure Controls / Personal Protection

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Personal protective equipment

Eye/face protection: Safety glasses with side-shields conforming to EN166. Use equipment for eye protection tested and approved under appropriate government standards.

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards.

Control of environmental exposure: Do not let product enter drains.

9. Physical And Chemical Properties

Appearance: White powder

Water content $\leq 0.5\%$

pH: 5.0-8.0

10. Stability And Reactivity

Chemical stability: Stable under recommended storage conditions.

Conditions to avoid: Exposure to sunlight.

Incompatible materials: Strong oxidizing agents



11. Toxicological Information

Acute oral LD₅₀ for rat: >2000 mg/kg.

Acute dermal LD₅₀ for rat: >2000 mg/kg.

Acute inhalation LC₅₀ (4 h) for rat: >4.09 mg/L.

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

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

Skin sensitization: Not a skin sensitiser (guinea pigs).

12. Ecological And Ecotoxicological Information

Effect on birds: low toxicity to birds, acute oral LD₅₀ for Coturnix japonica is >2000 mg/kg.

Effect on fish: low toxicity to fish, acute 96 hour LC₅₀ for rainbow trout is >100 mg/L.

Effect on aquatic invertebrates: low toxicity to aquatic invertebrates, acute 48 hour EC₅₀ for Daphnia magna is >968.3 mg/L.

Effect on algae: low toxicity to algae, acute 72 hour EC₅₀ for Pseudokirchneriella subcapitata is >100 mg/L.

Effect on honeybees: high toxicity to honeybees, contact acute 48 hour LD₅₀ is >0.023 µg/bee.

Effect on earthworms: high toxicity to earthworms, acute 14 day LC₅₀ for Eisenia foetida is 4.9 mg/kg.

13. Disposal Considerations

Disposal Method: Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environment laws, rules, standards and regulations. However, because acceptable methods of disposal may vary by location and regulatory requirements may change, the appropriate agencies should be contacted prior to disposal.

Empty Container: Completely empty package into application equipment. Then dispose of empty package in a sanitary landfill or by incineration, or if allowed by state and 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.