



Hangzhou Tianlong Biotechnology Co., Ltd.

Add: Room 1906, Fengqi Times Tower, No.338, Fengqi East Road, Hangzhou, Zhejiang, China.

MATERIAL SAFETY DATA SHEET

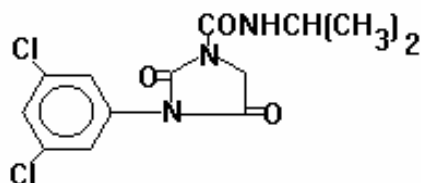
1. Chemical Product and company Identification

Product Name: Iprodione

Molecular Formula: C₁₃H₁₃Cl₂N₃O₃

Molecular Weight: 330.17

Structural Formula:



Chemical Name:

3-(3,5-dichlorophenyl)-N-(1-methylethyl)2,4-dioxo-1-imidazoline-carboximide

CAS No.: 36734-19-7

Supplier: HANZHOU TIANLONG BIOTECHNOLOGY CO., LTD

Address: Room 1906, Fengqi Times Tower, No.338 Fengqi East Road, Hangzhou, China, 310020

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2. Composition / Information on Ingredients

Composition	CAS No.	Content %
Iprodione	36734-19-7	95.0
Other ingredients		5.0

3. Hazards Identification

Inhalation: May irritate mucous membranes of nose and mouth.

Skin contact: The dermal toxicity of this product is low, however skin contact should be avoided.

Eye contact: May be an eye irritant.

Ingestion: Product toxicity is low but may be harmful if a large amount is swallowed. Symptoms include nausea, vomiting, abdominal pain and loss of coordination.

4. First Aid Measures

Inhalation: Remove victim to fresh air and keep at rest. Seek medical advice if

symptoms are experienced.

Skin contact: Carefully remove contaminated clothing. Wash affected areas with plenty of soap and water. Seek medical aid if symptoms are experienced.

Eye contact: Immediately irrigate with copious quantities of water for at least 15 minutes. Seek medical assistance as above.

Ingestion: Wash out mouth with water. Do not induce vomiting. Keep patient at rest and seek medical advice as above. Do not attempt to give anything by mouth to a semi-conscious or unconscious person.

First Aid Facilities: Ensure washing facilities are available, including eye-wash.

Symptoms: Symptoms include nausea, vomiting, abdominal pain and loss of coordination.

Medical attention: No specific antidote known. Treat symptoms after decontamination.

5. Fire-Fighting Measures

Extinguishing media:

Extinguish fire using: Waterspray, Carbon Dioxide, Foam, Dry agent .

Hazards from combustion products: Toxic compounds of carbon, nitrogen and chlorine may be given off when exposed to extreme heat or fire.

Precautions for fire fighters: Firefighters should wear full protective gear, including self-contained breathing apparatus. If possible and without risk, remove intact containers from exposure to fire. Otherwise, spray unopened containers with water to keep cool. Contain fire-fighting water by bunding area with sand or earth to prevent it entering any bodies of water.

6. Accidental Release Measures

Dealing with spills and disposals may result in the potential for increased personal exposure. Protective clothing and equipment as described in the personal protection section above should be worn. Avoid contact with spilled material or contaminated surfaces. Contain spill and absorb with earth, sand, clay, or other absorbent material. Sweep up and store in properly labelled, sealed drums for safe disposal. Deal with all spillages immediately. Keep people away. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority. Neutralising chemicals are not needed.

7. Handling And Storage

Handling: Keep out of reach of children. Avoid contact with the eyes and skin.

Storage: Store in the closed, original container in a cool, well-ventilated area.

Do not store for prolonged periods in direct sunlight. Store in a locked room or place away from children, animals, food, animal feed, seed and fertilisers.

Protect from frost.

8. Exposure Controls/Personal Protection

Exposure standards: No exposure standard has been assigned by the National Occupational Health and Safety Commission for the product or its ingredients. The Permissible Exposure limit for iprodione set by Bayer CropScience in manufacturing/formulation plants is 2 mg/m³.

Engineering controls: Control process conditions to avoid contact. Use local exhaust ventilation during manufacture. Use in a well-ventilated area only.

9. Physical and Chemical Properties

Appearance: White crystal

Water Solubility: 13 mg/L @ 25 °C

Solubility in Other Solvents: v.s. in ethanol, methanol, acetonitrile, toluene, benzene, acetone, and dimethylformamide

Melting Point: 136 °C

Relative density : 1.434@20°C

Vapor Pressure: 0.133 mPa @ 25°C

Partition Coefficient: 3.1004 @ 20°C

Adsorption Coefficient: 700

10. Stability and Reactivity

Chemical stability: Stable under normal conditions of use.

Hazardous polymerisation: No information available

Conditions to avoid: Extreme heat.

Incompatible materials: Avoid strong acids, bases, and strong oxidising agents.

Incompatible with strong alkalis

Hazardous decomposition products: Toxic compounds of carbon, nitrogen and chlorine may be given off when exposed to extreme heat or fire.

11. Toxicological Information

Acute toxicity:

Acute oral (rat) LD₅₀: 3500mg/kg

Acute oral (mice) LD₅₀: 4000mg/kg

Acute dermal (rat) LD₅₀: >1000mg/kg

Reproductive effects: Female rats were fed iprodione over three successive generations showed no effects on reproduction at doses at and below 1.25 mg/kg/day. Reductions in fertility and fecundity were not observed at doses of 5 mg/kg/day. Based on these data, iprodione is not likely to cause reproductive effects.

Teratogenic effects: There were no developmental effects noted in the offspring of pregnant rats receiving dietary doses of about 5.4 mg/kg/day. However, the dose rate of about 120 mg/kg/day elicited unspecified developmental toxicity in

the rats. Rabbits did not develop any dose-related toxicity at or below 2.7 mg/kg/day of iprodione, but did develop toxicity at 6 mg/kg/day . It appears that iprodione is not likely to cause teratogenic effects at expected exposure levels.

Mutagenic effects: No data are currently available.

Carcinogenic effects: A 2-year feeding experiment with rats showed no increases in tumor formation or tumor precursors (neoplastic foci) at dietary doses of about 2.5 mg/kg/day. An 18-month study in mice showed cancer related effects at doses up to approximately 22 mg/kg/day. Current evidence on the carcinogenicity of iprodione is inconclusive.

Organ toxicity: Target organs identified in animal studies include the reproductive system (prostate gland and uterus), liver, and kidneys.

12. Ecological Information

Fish toxicity:

LC₅₀ (96 hr): 4.1 mg/L rainbow trout

LC₅₀ (96 hr): 3.7 mg/L bluegill sunfish

Daphnia toxicity: EC₅₀ (48 hr): 0.25 mg/L

Toxicity to algae: IC₅₀ (72 hr) 15.3 mg/L

Bird toxicity:

Acute oral LD₅₀: > 2,000 mg/kg bobwhite quail

Acute oral LD₅₀: 10,400 mg/kg mallard duck

Bee toxicity: Low hazard to bees

13. Disposal Considerations

Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. Break, crush or puncture and bury empty containers in a local authority landfill. If no landfill is available, bury empty containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers and product should not be burnt. Returnable containers should be taken back to point of supply for refill or storage. Dispose of waste product through a reputable waste contractor.

14. Transport Information

Class: 9

UN No.: 3077

Packing group: III

15. Regulatory Information

Safety Phrases: Keep out of reach of children

Keep away from food, drink and animal feeding stuff

Do not breathe spray

When using do not eat, drink or smoke

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

In case of accident or if you feel unwell, seek medical advice immediately (Show the label where possible)
Use appropriate containment to avoid environmental contamination

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.