

MATERIAL SAFETY DATA SHEET

Manufacturer/information service:

Shanghai M-Win Chemicals Co., Ltd

Suite 1708 Block A, Tomson Center, 228 Zhangyang Rd, Pudong, Shanghai 200120 China

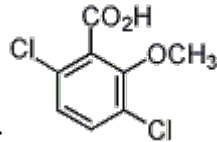
1. Chemical Product Identification

Product Name: Nicosulfuron 10% + Dicamba 30% + Mesotrione 20% WP

Dicamba

Molecular Formula: C₈H₆Cl₂O₃

Molecular weight (M.Wt):221.04



Structural Formula:

Chemical Name: 3,6-dichloro-2-methoxybenzoic acid

Form: Solid

Color: Colorless

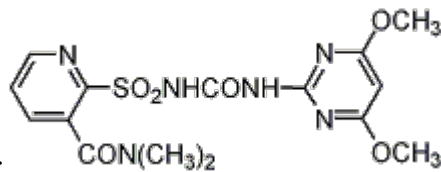
Odor: Odorless

CAS No: 1918-00-9

Nicosulfuron

Molecular Formula: C₁₅H₁₈N₆O₆S

Molecular weight (M.Wt):410.4



Structural Formula:

Chemical Name:

2-[[[(4,6-dimethoxy-2-pyrimidinyl)amino]carbonyl]amino]sulfonyl]-N,N-dimethyl-3-pyridin
ecarboxamide

Form: Solid

Color: Colorless

Odor: Odorless

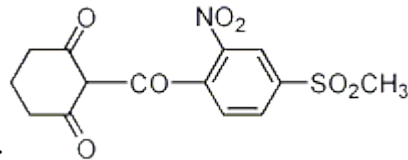
CAS No: 111991-09-4

Mesotrione



Molecular Formula: C₁₄H₁₃NO₇S

Molecular weight (M.Wt):339.3



Structural Formula:

Chemical Name:

2-[4-(methylsulfonyl)-2-nitrobenzoyl]-1,3-cyclohexanedione

Form: Solid

Color: Beige to tan

Odor: Faint; pleasant

CAS No:104206-82-8

2. Composition / Information on Ingredients

Composition	CAS No.	Content
Dicamba	1918-00-9	97.0
Nicosulfuron	111991-09-4	10%
Mesotrione	104206-82-8	20%
Other ingredients		40%

3. Hazards Identification

More important danger for the man: It is not inhibition of cholinesterase .

Dangers for the environment: It shows low toxicity to birds and fish. It is practically non-toxic to bees.

Physical-chemical dangers: The substance decomposes on heating producing toxic and corrosive fumes including hydrogen chloride

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: drink 1 to 2 glasses of water and induce vomiting by sticking finger down back of throat (or other means). Do not induce vomiting if victim is unconscious.

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: safety glasses or goggles, rubber gloves, shoes plus socks, long-sleeved shirt, and long pants and hats.

6. Accidental Release Measures

Personal cautions: safety glasses or goggles, rubber gloves, shoes plus socks, long-sleeved shirt, and long pants and hats.

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: Dicamba is poisonous if swallowed. It may be absorbed through the skin. Avoid skin contact; wear hand protection, clean protective clothing and a face mask when handling concentrate. Wash thoroughly with soap and water after using. Keep the material out of reach of children and well away from foodstuffs, animal feed and their containers. If poisoning occurs, call a physician.

Storage: Provision to contain effluent from fire extinguishing. Separated from food and feedstuffs. Ventilation along the floor.

Technical protective measures:

Fire and explosion protection: the area must be far from fire and flammable materials, high temperature and strong oxidizers.

8. Exposure Controls/Personal Protection

Personal protective equipment

Respiratory protection: Such equipment should only be used if the employer has a written program that takes into account workplace conditions, requirements for worker training, respirator fit testing and medical exams.

Protective gloves: safety gloves.

Eye protection: Wear impact resistant eye protection with side shields orgoggles. Wear a face shield along with goggles when working with corrosive, highly irritating or toxic substances.

Industrial hygiene: Industrial hygienists are available to answer your questions regarding the control of chemical exposures using exhaust ventilation, special work practices, good housekeeping, good hygiene practices, and personal protective equipment including respirators. In addition, they can help to interpret the results of industrial hygiene survey data.

9. Physical and Chemical Properties



Melting Point: 114-116°C

Density: 1.57 g/cm³ at 25 °C

Bulk density: not applicable.

Water solubility: 6500 mg/L @ 25 °C

Other solubility: Acetone 810 g/L, Dichloromethane 260 g/L, Dioxane 1.18 kg/L, Ethanol 922 g/L, Toluene 130 g/L, Xylene 8 g/L(all at 25 °C)

PH value: 5-8

Flash point: Dicamba is nonflammable. 390 degrees F (199 °C)

Ignition temperature: not applicable

10. Stability and Reactivity

Conditions to avoid: fire or flame, heat and high temperature.

Products to avoid: strong oxidizers.

Thermal decomposition: 392 degrees F (200 °C)

Hazardous decomposition products: toxic and corrosive fumes of chlorides and toxic oxides of carbon.

Hazardous reaction: none

11. Toxicological Information

Contact with the skin: Redness.

Contact with the eyes: Redness, Pain. Blurred vision.

Inhalation: Cough. Laboured breathing. Vomiting. Weakness.

Ingestion: Abdominal pain. Diarrhoea. Nausea (further see Inhalation).

Chronic toxicity: Doses of 25 mg/kg/day in the diet administered to rats for 2 years produced no observable effects on survival, body weight, food consumption, organ weight, blood chemistry, or tissue structure. Consumption of dicamba at high levels over a long period of time has been shown to cause changes in the liver and a decrease in body weight in rats. In mice, some enlargement of liver cells has occurred.

Reproductive effects: In a three-generation study, dicamba did not affect the reproductive capacity of rats. When rabbits were given doses of 0.5, 1, 3, 10, or 20 mg/kg/day of technical dicamba from days 6 through 18 of pregnancy, toxic effects on the mothers, slightly reduced fetal body weights, and increased loss of fetuses occurred at the 10 mg/kg dose. These data suggest that dicamba is unlikely to cause reproductive effects in humans at expected exposure levels.

Teratogenic effects: No teratogenic effects have been shown in lab animals such as rabbits and rats exposed to dicamba.

Mutagenic effects: Dicamba has not been shown to be a mutagen .

Carcinogenic effects: Rats fed up to 25 mg dicamba/kg/day for 2 years showed no increased incidence of tumors. This evidence suggests that dicamba is not carcinogenic.

Organ toxicity: Chronic exposure can lead to the development of the same symptoms as



described for acute exposure.

12. Ecological And Ecotoxicological Information

Effects on birds: Dicamba is practically nontoxic to birds. The LD50 for technical dicamba in mallard ducks is 2009 mg/kg. The 8-day dietary LC50 in mallards and in bobwhite quail is greater than 10,000 ppm.

Effects on aquatic organisms: Dicamba is of low toxicity to fish. The LC50 (96-hour) for technical dicamba is 135 mg/L in rainbow trout and bluegill sunfish, greater than 100 mg/L in grass shrimp, and greater than 180 mg/L in fiddler crab and sheepshead minnow. The LC50 (48-hour) for dicamba is 35 mg/L in rainbow trout, 40 mg/L in bluegill, 465 mg/L in carp, and 110 mg/L in *Daphnia magna*, a small freshwater crustacean. Effects on other organisms: Dicamba poses little threat to wildlife. Dicamba is not toxic to bees.

13. Disposal Considerations

Spillage disposal: Do not wash away into sewer. Sweep spilled substance into containers; if appropriate, moisten first to prevent dusting. Carefully collect remainder, then remove to safe place.

rovincial, and Local regulations. Do not flush to surface water or sanitary sewer system.

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.